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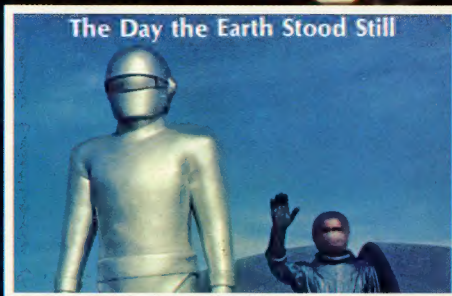
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- Animating the STAR WARS Chess Sequence
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“LET THE WOOKIEE WIN!”

(OR . . . ANIMATING THE STAR WARS “CHESS” SEQUENCE)

America is in love with *Star Wars*—a movie in which heroes are *real* heroes, villains are *real* villains, and the special effects crew are the *real* stars.

Monsters and other grotesqueries abound, each more hideous than the most terrifying childhood nightmare. Two of the major monster-makers in *Star Wars* were John Berg and Philip Tippett, who are well known in Hollywood for their work in stop motion animation. They worked on two segments of the film, both memorable for their outlandish space creatures. One

was the cantina sequence, where Luke Skywalker and Ben Kenobi get involved in a barroom brawl with a bunch of monsters . . . and the other was the chess game between the robot R2D2 and the Wookiee, the furry creature, resembling the offspring of an ape and a dog.

John and Phil originally were called in to work on the film when director George Lucas decided he needed more monsters in the Cantina. Cameraman Dennis Moren had worked with John and Phil many times before, and admired their creative

genius at designing and animation. Upon his recommendation, the two were assigned to work with make-up artist Rick Baker. Together, they did make-ups and masks for various creatures. According to Phil, Lucas took many of the monster designs from drawings by Ron Kobb, a Hollywood cartoonist who works for the Free Press. The others Phil and John made up themselves from their own monstrous imaginations.

Both had plenty of experience in that area. In John's words, “I WAS the Jolly Green Giant.” While they were

both working for the now defunct Cascade Pictures, they did the famous Jolly Green Giant TV commercial. John carefully lathered in green make-up, stood in for the giant in a miniature set they'd built, using animated characters. Phil said that's where they received much of their training. Another of their well-known commercials was the Pillsbury doughboy . . . the plump little guy with the cute giggle.

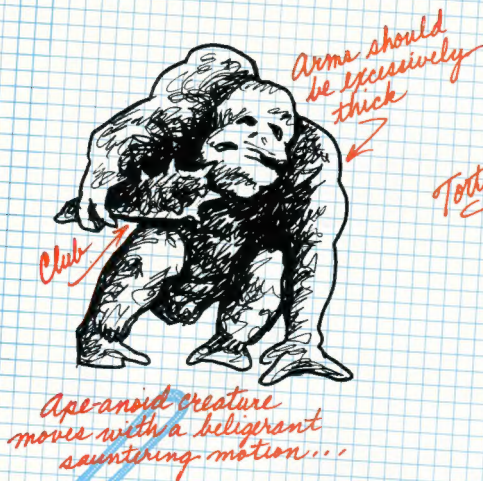
They got involved in the chess sequence of *Star Wars* after Lucas saw some monster designs they'd

submitted for use in the cantina sequence. Originally, Lucas and producer Gary Kurtz had planned to use people dressed as monsters for the chessmen. However, someone else used the idea first, and Lucas and Kurtz didn't want to duplicate it. When Lucas saw the little monster sculptures, which were about four or five inches tall, he got the idea of using animated characters instead. So they went to work.

Lucas shot the spaceship scene in which the chess game took place, as a plate. The still showed three charac-

ters standing around looking at the chess game. There was nothing on the game table, which was covered with black velvet. After shooting the scene at a number of different angles, the background plates were put in the camera and a line-up clip was made of those shots. The clip was then put in the camera, to line up the perspectives on the little chessmen, animated by Phil and John. Through a double-exposure system, the two elements—the background and the chessmen—were combined photographically.

By VICKY O'HARA



After consulting with Lucas on the types and numbers of creatures he wanted, John and Phil had sculpted 10 or 12 wild-looking creatures, about five or six inches tall. Most were made of foam rubber, the kind used for upholstery wrapped around wire armatures. The wire made the figures flexible enough to be bent into different positions, repeatedly, and strong enough to hold the shape. The figures which didn't move around were sculpted of solid materials. One creature was a little more elaborate. A ball and socket was used in the skeleton to allow for more dramatic movement. The skeleton was then sculpted and cast. All figures were attached to the set using screws tied into their feet.

Initially, John and Phil set up 10 figures in the game line, but it didn't work out. Phil explained, "Because of the nature of these things—they were really goofy looking little creatures—Lucas decided to pull some out. There were so many, you couldn't tell what was going on on the board. Then he said to go ahead and shoot, and just explained basically what he wanted in the shots."

One of the first shots was a long one of a couple of figures moving across the board, in the background. It was fairly easy. Then, Lucas wanted one of the background creatures to jump into the foreground, after which another creature, manipulated by R2D2, would run over to the first fig-

ure, and throw it to the ground. This second creature was the one with the ball and socket articulated skeleton. According to the rules of the game as spelled out in the script, the Wookiee moved the first creature, and R2D2 countered with the second creature. R2D2 won the skirmish.

Phil said John did most of the more difficult primary animation, while he manipulated the figures in the background. The very nature of stop

motion animation makes it a very tedious task, requiring great concentration. "In stop motion animation," Phil said, "You don't have anything to relate to, no record of each fractional movement, as you do in cartoon animation, where you have each drawing to look back on and refer to. Stop motion animation is all in your mind. Each character is moved manually,

(continued on page 9)

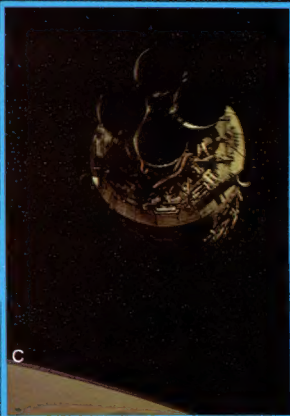




The Ships of STAR WARS

The ships of *Star Wars* combined the best aspects of special effects imagination and the extrapolative designs of future technology. From the hexagonal solar-sail "wings" on the TIE fighters to the incongruous air ducts and braking flaps on the Rebel craft (used obviously

for planetary defense within the atmosphere) they all lend to the uniqueness and careful planning throughout the film.



- A. Imperial battlecruiser over Tatooine
- B. Detail of the Millennium Falcon
- C. The escape pod descends toward Tatooine
- D. The Millennium Falcon does battle
- E. A Rebel X-Wing in attack position



- F. An Imperial TIE fighter releasing lasers
- G. Rebel fighters over the Deathstar

- H. & I. An Imperial battleship pursues Senator Organa's "diplomatic" space-cruiser as it zooms over the surface of Tatooine.



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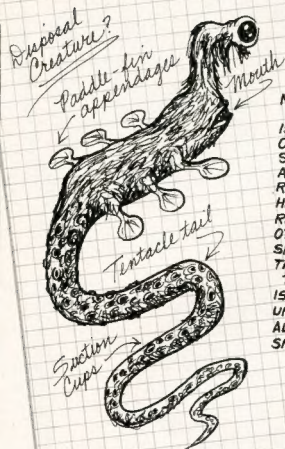
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"Wookiee"

(continued from page 6)



NOTE:
EVEN IN SPACE, GARBAGE IS A PROBLEM. DISINTEGRATION CONSUMES TOO MUCH ENERGY, SO STORAGE IS ESSENTIAL UNTIL A PLANETARY DISPOSAL IS REACHED. AND, AS THROUGHOUT HISTORY, WITH GARBAGE COME RATS, COCKROACHES, AND OTHER CREATURES THAT BOARD SHIPS IN THE HUGE FOOD CONTAINERS BROUGHT ON BOARD. THEREFORE, THE "CYCLOPEAN" IS USED IN EACH STORAGE UNIT. IT KILLS AND CONSUMES ALL ORGANIC LIFE WITHIN ITS SMALL WORLD....



one frame at a time."

"The more characters you have," he added, "the more you have to concentrate—which way the arm is moving on one character and which way the head is moving on another—which direction, how fast. So it took two of us to do all the characters." They divided up the board, with each of them handling four creatures at a time.

Dennis Muren, who did many of the space ship shots, did the shooting for the chess sequence, watching carefully to see that the characters were always lined up in proper perspective to the background. The whole film was shot in split shifts, with Richard Edlund and his crew manning the cameras during the day, and Muren's crew taking over at night. Phil said that in addition to having worked together, he, John and Muren had been good friends for years. Muren, Phil said, had been in the film business quite a while. When he was 17 years old, Muren produced and directed a film called "The Equinox." After putting together the entire feature, Muren sold it to distributor Jack Harris.

Together, the three of them worked for a solid week to shoot the

Detail of "Cyclopean"



Periscope-like head allows rest of body to remain submerged during visual sightings.

chess sequence, trying to meet a tight deadline. John said they were given a quiet corner of the studio in which to work, and left alone most of the time. He explained that even with the hectic production schedule, their need for concentration was respected. "They were really good about leaving us alone to do the work" he said. "They knew we were doing the best we could. Sometimes, somebody'd pop in just to see what was going on—because it is pretty interesting."

John added that they worked from three in the afternoon, when they'd start setting up their shots, until seven the next morning. Every single day of the week, just to complete that one sequence. "You can imagine what we looked like at the end of all that," said John, "pretty haggard." Phil added, "We'd go home, sleep, and come back the next day to start the whole thing over again."

When the shooting was completed, they took the two separate elements—the background and the chessmen—to Frank Van Der Veer's optical house. There, the two images were combined on an optical printer. "It actually was a very simple kind of effect," Phil said, "but it worked well. It was just a double exposure, where

(continued on page 19)

THE BAKER SCRAPBOOK



IT'S ALIVE



THE EXORCIST



THE THING WITH TWO HEADS



OCTOMAN



ALIEN HEAD

RICK BAKER

CREATOR OF STAR WARS ALIENS



Illustration by MICHAEL STEIN

The world may not have heard of Rick Baker before it became known that he, not the 40 foot mechanical ape, really played King Kong, but since the fantastic success of Star Wars, for which he and his crew supplied almost thirty alien character masks, Rick Baker is becoming one of the hottest make-up artists in Hollywood. Although Rick is only 27, he began his career in his early teens, making ape outfits because of his fascination with gorillas. At 18 he turned professional, and since then his many credits include a half man, half octopus for The Octoman, a missing link in Schlock, wearing his own two-headed gorilla in The Thing With Two Heads, and assisting Dick Smith in The Exorcist, which included creating a dummy of Linda Blair for the scene in which her head revolves 360 degrees. Baker has also contributed effects or make-up to Live And Let Die, Flesh Gordon, Squirm, It's Alive, The Furie, The Autobiography of Miss Jane Pittman, and he designed the mask for the Jolly Green Giant. Associate Editor Jerry Neeley spoke to Rick in Hollywood, and, of course, the immediate subject of conversation was Star Wars.

FF: When did you first become involved in Star Wars?

RICK: I'm not sure of the exact date. It was after they had finished the principle photography.

FF: How long was it in production before you were called into it?

RICK: They had finished everything. They were just working on the effects.

FF: Why were you called in? Didn't another make-up artist become ill?

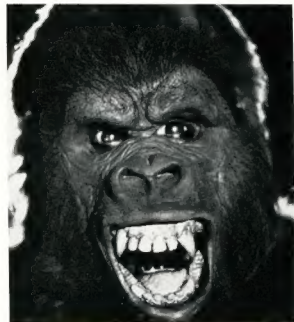
RICK: Yes, Stuart Freeborn did the make-up for the rest of the film. He was ill, had some virus or something and wasn't able to finish the aliens himself in the cantina scenes. Some of his people also insisted that George Lucas was never really happy with what he got. George wanted more and better alien beings.

FF: Why did they pick you?

RICK: They talked to everybody, just about everybody I know that's a make-up man and does that kind of work.

FF: Did you show them any sketches?

RICK: Just my portfolio, like I do anybody. Mainly, I think it might have been my enthusiasm about the pro-



Rick as King Kong, his most active creation.

ject. I talked to George and as we were discussing the sequence we were both getting really enthusiastic about what could be done. That may have been what persuaded him.

FF: Weren't some of the masks originally made for other projects?

RICK: What actually happened was that they wanted as many aliens as they could get. I gave them my initial bid and they said they couldn't afford it, but that they really wanted to use me. Was it possible that we could work something out? I wanted to do it, but between the time I gave them my first bid and when they finally got back to me, I didn't hear from them, so I went ahead on another job I was working on at the time—*The Incredible Melting Man*. I said, listen fellows, I'm already working, and I can't devote my full effort to it. So they said well, can't you get a crew together and just supervise. So that's what I did, basically. I talked to a lot of my



These pages contain a few of the many examples of the art of Rick Baker. Above left is a clay model of a Kong head; above center rests a mask of Charles Laughton as Quasimodo, "The Hunchback of Notre Dame"; above right one of the intricate masks used in "The Incredible Melting Man" glares horribly.

S-F friends; John Berg (who built the models for the chess game in *Star Wars*), Phil Heoge (the special effects director for *Flesh Gordon*) and Doug Beswick (an animator for the *Land of the Lost* TV program, and for Rick Baker's *Schlock*).

They were all really enthusiastic about the project and wanted to work on it, so we worked for a pretty reasonable price. And we all got paid the same. I paid myself the same.

FF: You said you were enthusiastic about the project. Did you think it was going to be a big hit at that time?

RICK: I didn't really know. I thought it was going to be a hit for the S-F people from what I had heard about the film, and I did see a little bit of it at one point. But I was already a big fan of it because it was coming from George and his ideas for the film were very similar to the way I thought about it: a lot of fantasy, and just good fun.

FF: How many of the aliens did you create yourself? They used many of Stuart Freeborn's creations, didn't they?

RICK: Yes, they had to where you actually see the bar itself. It was already shot. Our work was the inserts. When they cut to a little corner of the bar, in the nooks and crannies, we put in different aliens and they redressed the set. So every time you see the full cantina, that's Stuart's work. He really had quite a few things in there.

FF: How many aliens did you create for *Star Wars*?

RICK: About thirty.

FF: What about the cantina band itself?

RICK: The band was ours. You see, there's no band in the original story. That was something George wanted to do. And we originally didn't create that particular alien specifically for the band. They had cut our budget. We had a limited amount of time, about six weeks to complete these creatures. And they wanted about thirty, if they could get them. So we worked as hard as we could.

FF: Did you design them all yourself?

RICK: No, everyone that worked with me designed at least one of them. Ron Cobb designed a couple of them. So did Ralph McQuarrie.

FF: McQuarrie actually designed some of the aliens?

RICK: Sure, he had done some sketches and George picked out one that he liked very much. It's the white, spider-headed little thing.

FF: What about the one that has the long kind of elephant-like snout to it?

RICK: That's one of Stuart's. All the exterior ones were Stuart's. Actually, I had to use some of my older masks as well.

FF: Why?

RICK: We only came up with a certain number that could have been finished in that six weeks, so I told them I had a lot of old masks that haven't really been seen in films before. I'll just throw those in, and you could shoot those. I planned on them being mainly the background, but he fea-

tured a couple of them.

FF: How was working with Lucas? You seemed to have spent a lot of time with him.

RICK: No, I didn't really spend that much time with him. Mostly we talked in the beginning, and had several later meetings discussing the concepts of the beings. We all did drawings and brought them in. He had something very specific in mind and, oddly enough, he never really got what he



A clay sculpture of a Mr. Hyde character expresses the evil side of man's nature.



Above left is one of the demonic masks of possession from "The Exorcist", while above center another ape mask is ready for use. Above right is a devil-type mask that Rick created earlier, but was also used as an alien in the "Star Wars" cantina scene.

wanted, I don't think. But he was very happy with what we came up with. It was probably 50% of what he wanted, and that's the same way we all felt. Because of the budget, and the time limitations, the creatures weren't very good. Fortunately, he photographed it well.

FF: Do you think you may work on the sequel?

RICK: I'd love to, but I don't know. There's no way of telling.

FF: What about the ABC TV series you're working on—*Star World*?

RICK: I'm not working on it anymore.

FF: You finished it?

RICK: No, I didn't do it. I designed some stuff and then told them I couldn't go on with the job because things got too hectic. I was working on *The Furie* at the same time. They changed schedules on *The Furie* and I wouldn't have been able to do both jobs, and I was already committed to *The Furie*.

FF: What did you actually do in it?

RICK: Just some make-up effects. These two kids have the psychic powers to make people bleed and do weird things; scars bleed for no reason, and one lady's fingernails start bleeding. One lady is levitated by this boy with the power. She has blood pouring out of her nose, her mouth, her eyes, arms and legs—everywhere. He spins her around and she's just coated with blood. A lot of good stuff.

FF: Now that you're finished with *Furie*, what are you going to do next?

RICK: A sequel to *It's Alive*. Larry Cohen called me up and wants a couple of more baby monsters. That's just a bash-it-out job. He said he's going to show it about as much as he did in the original, which is nothing.

FF: Did it do that well when it was released?

RICK: Yes, it did very well. And he wants to have three baby monsters in this one.

FF: Triplets?

RICK: Yeah, and he wants them identical. I told him I didn't think that's a good idea. We should make some-

thing different. He said, "Well, will it cost any more money?" I told him yes. "Well let's keep them identical," he said. He may show them a bit more this time though. I'm trying to talk him into doing something more elaborate—more expensive—than I did in the original, but I don't know.

FF: Weren't you thinking about doing *It's Alive* with model animation?

RICK: Yeah, well I'm sure he won't go for that.

FF: I guess you don't get to work on a *Star Wars* very often?

RICK: That's the truth. ■

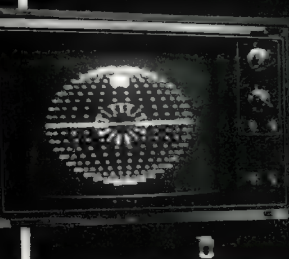
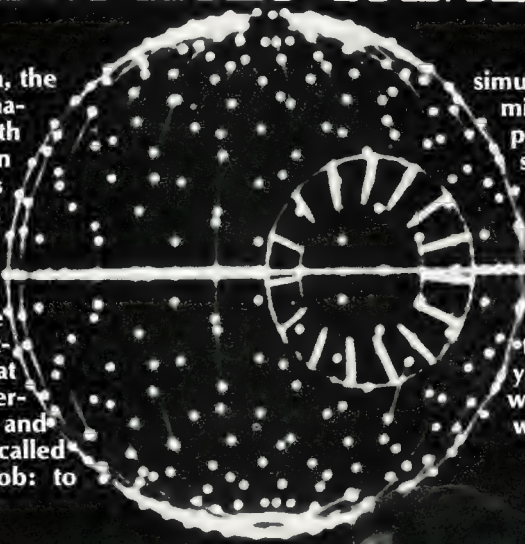


To the left is a monkey mask created as an exercise. Next is a wolf's head used as an alien cantina dweller in *Star Wars*, and to the right, one of the early masks used in *The Incredible Melting Man* stares balefully.

...Animating the Death Star Trench...

For Larry Cuba, the 40 second animation of the Death Star Trench in Star Wars was no small task — It took months of programming and over twelve hours of shooting time — that plus the University of Illinois and a language called GRASS. His job: to

simulate the pilot's mission with a point of view shot from the Death Star approach to the flight down the trench at its surface. The problem: the trench had not yet been created when the effect was needed.



The computer schematic of the Deathstar created by Larry Cuba hovers above its own image on the video display screen.





General Dodonna stood before the starpilots and navigators of the rebel forces—the spectre of the dreaded Death Star, headquarters of the Empire, uppermost in their minds. They did not have much time. "The Imperial Empire's battle station is approaching from the far side of Yavin. It must be stopped once and for all," was the General's command. "Its defenses are designed around a direct, large scale assault. A small, one man fighter should be able to penetrate the outer defense."

Luke and the others assembled in the long narrow room watched the computer screen as it displayed a simulated view of the one flaw in the Death Star. The General gestured towards the diagram of the mission as he explained how the Empire could be attacked.

"You're required to maneuver straight down this trench and skim the surface to this point," the General indicated. "The target area is only two meters wide. It's a small thermal exhaust port. The shaft leads directly to the reactor system. A precise hit will start a chain reaction that should destroy the station. . . . Man your ships and may the force be with you."

The computer schematic helping General Dodonna explain the destruction of the Death Star to Luke Skywalker, Han Solo and the others of Star Wars' rebel forces was actual-

ly a piece of film being rear projected onto the rebels' computer screen. It is the only example of digital computer animation in the entire Star Wars film. On the screen for a bare forty seconds, it is nonetheless the result of months of work. It utilizes the best in

"Man Your Ships And May The Force Be With You."

computer hardware technology—and makes use of a unique software system that enables the computer to be used not only for the creation of art but as a new educational tool as well.

For Larry Cuba, assigned the task of filming the sequence, the problem was a tough one. His job was to simulate the pilot's mission with a point of view shot from the approach to the Death Star to the flight down the trench at its surface. The schematic was to match the reality of the trench itself in all its complexity—but unfortunately, the trench had not been created at the time the effect was needed for the film.

Basically, there are two ways an effect such as this can be created in a film—the sequence on Dodonna's screen could have been optically

filled in on the film after the live action was shot—the classic "blue screen" method, whereby the rebels' computer screen would have been a solid blue to allow later superimposing of the animation sequence; or, the sequence could be rear projected and filmed as a unit. Lucas wanted the second approach—perhaps to keep a feeling of reality and continuity. But, since most of the special effects were completed after the live action shooting (a piece of animation showing the exhaust port and shaft of the Death Star which ran right after Larry's scene, for example, was completed a full six months later), Larry had to proceed with what he had.

What he had were examples of each of the six component modules of the Death Star trench, and, in some cases, photographs. But most important, he had the use of an incredible computer animation set up at the Circle Graphics Habitat of the Chemistry Department at the University of Illinois in Chicago.

Larry Cuba is a 27 year old computer filmmaker from Los Angeles, currently a Research Associate of the Art Department at the University of Illinois. Born in Atlanta and a former St. Louis architectural student, Larry had decided to be a computer filmmaker and had worked in Los Angeles (with computer film pioneer John Whitney) as a programmer.

Profile by NEESA SWEET

Larry was no stranger to the U of I—he'd been there before because of the work going on and partly to use the set-up, including a new computer language called GRASS. GRASS was to play a major role in the Star Wars sequence.

The Graphics Habitat system at the Circle is a blending of computer and television technology that opens the doors of computer creation to educators, artists and anyone else, whether they know computer programming or not. Instead of having to program in each command, a series of analog instruments in the set-up allow the operator to form a direct relation with his actions and the image on the cathode ray screen. At the U of I, it's used by professors and others who want to create unique visual presentations for their classes. The system provides a simple and reinforcing way of creating images that can vary in length, width, and height, and be changed over time as well as in brightness or color. It's a fun system to use—like a "three dimensional chalkboard" says Larry—and that encourages its success.

At the heart of the system is a Vector General 3DI cathode ray tube with dials, light pen and an electronic tablet. This device draws lines from points fed to it from the minicomputer to which it is attached. The minicomputer is a PDP 11/45 model with a desk unit and input keyboard. It performs the actual computations necessary to make pictures.

The dials, light pen and electronic tablet of the Vector General allow the operator a direct relation between his actions and what is seen on the screen. For example, a figure can be called up and manipulated; or, an image can be traced on the tablet; an electronic impulse will sense where the pen is at various periods of time, and the coordinates of those points will be picked up and transferred as an image, with connecting lines to the screen via the minicomputer.

At the Graphics Habitat, the Vector General and the minicomputer are hooked up to an "Image Processor" and other video equipment, allowing the operator to place almost any image desired on tape. In the case of Larry's Star Wars sequence, however, the ultimate output had to be on film. There was the capability of doing this directly off the screen of the Vector General (a standard Mitchell 35 animation motor tied to the computer, with the screen and camera under a



The system is working in stop motion sequence, triggered by the computer, as each frame of the Death Star trench is constructed on the cathode ray screen.

shroud for extra light protection was ultimately used) so the other components were not needed.

What was needed was GRASS. GRASS, of the Graphics Symbiosis System, is a computer language developed in 1973 by Thomas A. DeFanti, then a graduate student at Ohio State University, as his doctoral dissertation. Tom's purpose initially was to provide a method for artists to explore computer art without the need or the help of a programmer. Today, Tom is a Professor of Information Engineering at the Circle and GRASS is a central part of the Graphics Habitat system. The basic idea of GRASS is to provide a system of easy to learn commands that can perform a variety of tasks with a minimum of repetition. For example on a demonstra-

tion of the language, Larry was able to call up a graphic representation of the chemical structure of a starch molecule (a hexagon), show it on the screen, rotate it on various axes and even add another stored figure, a propeller, and make it into an airplane type figure flying a path over the screen. The movements, locations, speed and angle of movement, are controlled by dials.

For Star Wars, Larry programmed his effect in GRASS, with a few necessary additions. On a previous visit to the U of I, Larry had written the tablet program that made possible the use of free hand drawings on the tablet. As the tablet transferred the list of points making up the shape or object to the computer, the points would be stored, so that the object

could be recalled any time the operator chose.

When the Star Wars work began, Larry had to rewrite his program so that, instead of just picking up two dimensional coordinates at every point, the program would stop and wait for a third, z, coordinate, or height to be entered. In this way, a three dimensional drawing could be placed into the computer to be manipulated by GRASS.

Larry worked basically from a photograph of mat painting of the Death Star. He created a computer picture by combining a number of circles and arcs. The circles in particular, were fairly easy constructions, as the program did include formulas for their representation. The figure thus created could be rotated

and made larger or smaller by manipulation of the dials.

"To complete the shot," said Larry, "I had to continue the pilot's view of the Death Star to include the flight down the trench to the target at the end. The trench shown in the film was made up of hundreds of models. Six basic shapes were used to form an actual trench forty feet long. At this point I worked from one each of the six basic modules and the photographs of the trench as it was being constructed."

First, a computer representation of each basic module was made. This process is called digitizing because numbers are used to indicate line endpoints. A photograph of each model is placed on the data tablet. As the pen is pressed, the object being

created appears on the screen and a cursor indicates the current position of the pen. The height of the point, or z coordinate, is entered separately by selecting one of the function buttons. Another button specifies whether or not a line is drawn between points and the display reflects this choice. To monitor the construction in three dimensions, the Vector General dials could be used to rotate it and examine it from all sides.

Once the six basic modules were stored in the computer, Larry wrote a program to combine the modules into larger structures. His computer version of the trench was constructed of u-shaped sections placed side by side. "To make one of these sections, I recalled a digitized module and positioned it using the dials," he explains. "Then, I added a second module and continued in this way until the "U" was formed. This completed figure could now be moved as a unit. To complete the trench, over fifty U-shaped sections were constructed in this manner and stored."

Once Larry had the components, each image that was to be part of the finished film had to be shot. It took about two minutes for each frame to be constructed—each shape was shown by the computer in perspective and combined with four others to form a single frame of the film. After the "construction" was completed for each frame, the program cued the camera, and the exposure was made. Two thousand exposures later, Larry had the finished film. Two minutes of time lapse photography coming from over twelve hours of "real time." Two minutes from which the forty seconds appearing on General Dodonna's screen was selected.

Larry first became involved with Star Wars a year ago January. Lucas was looking for computer animation. Larry showed a film of his called "First Fig," submitted a bid and got the job. He'd talked to Lucas before the director left for England, and he was spending time in Los Angeles collecting material and what he could get of the models.

Then he came to Chicago where he had come periodically to work with Tom's system. He began to work with two programmers, T.J. O'Donnell, and Tom Chomica, and a photographer to photograph the models—all students at the University of Illinois. It was an exacting task—every model had to be carefully measured, with the heights written down at the right

points, so that when a point was entered into the computer, Larry would know which height to enter with the other coordinates.

Then there was the fact that the time he thought he had to complete the project was suddenly, and typically, cut short. At first, the studio had told Larry that they needed the film June 1—but when the studio in LA got the shooting schedule from England, there was the scene with General Dodonna planned for shooting in England on May 6. They called Larry and told him of the misunderstanding. The scene was going to be shot in two weeks. And not only that—they needed the film two weeks before the shooting to make registration prints. To keep to the schedule the way it was the film would have to be shipped that day.

The film at that point, of course, wasn't ready. Larry had little choice but to suggest doing the scene optically—but they still wanted rear projection. So the Los Angeles studio called England—and at the last minute the shooting schedule was rearranged to allow them to film the scene the very last day the crew had "command" of the large sound stage containing the rebel base. (The Star Wars crew had been using every available large sound stage in England and this was the biggest). It gave Larry a few more weeks—the film had to be mailed out on May 6.

Tom DeFanti, observing the situation, said that if all was done according to schedule, it would be a "miracle."

As May 6 approached, the situation became quite tense. And then, the hardware system itself kept breaking down. On trial after trial, Larry and his people tried everything. They removed the disk, cleaned it, took it apart—and 30 minutes later: *crash*. Something kept happening that would not let the program complete its run.

Larry had been working 20 hour days and sleeping in the lab. It was the Saturday night before the Monday that the film was due to be shipped out. Larry had already reached the decision that he was going to call Los Angeles on Monday and tell them that he was having equipment problems. They would have to go to an optical

effect—there was no longer any choice.

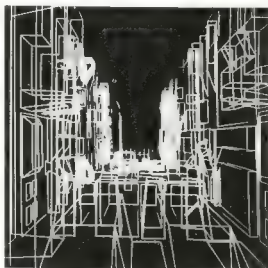
It was midnight and Larry thought he would take a final nap in the lab. He thankfully turned the air conditioner down. The computer needs a constantly cool environment to function and for weeks Larry had been freezing. This nap at least was going to be comfortable.

About 3 in the morning Larry woke up — partly out of habit as his schedule had become one of sleeping three hours a night. He decided to try to run the program one more time.

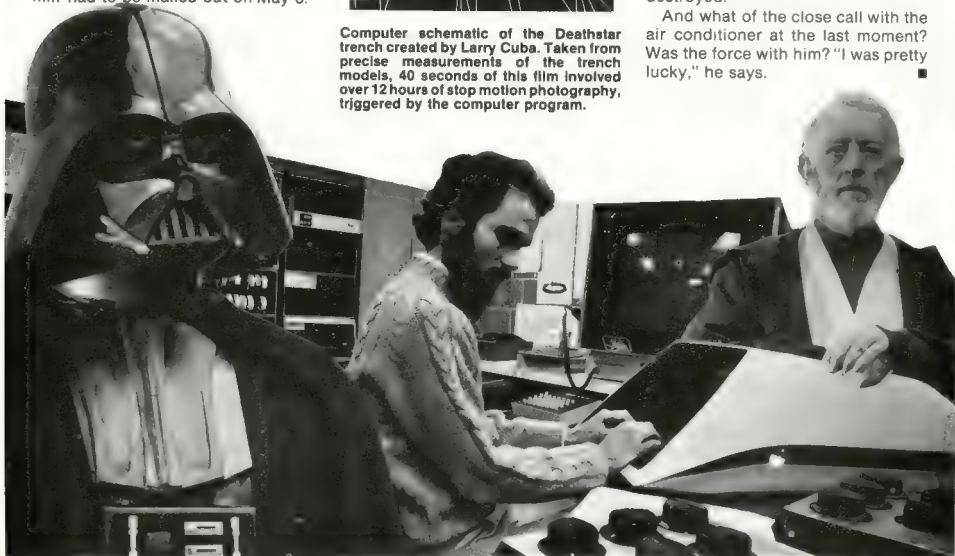
It worked perfectly. It seemed the computer had some circuit that had been *too*-sensitive. It only worked when the air conditioning was turned down for a time. The filming ran all the next day and was able to be shipped out on Monday, just in time for the shooting.

From then on, the effect was in England, and, as Larry found out later, things did not run smoothly there either. As Anthony Daniels, who played C3PO, told him later, it was quite a project to coordinate the animation with the live action. The pilots would be talking, they would turn around, and the wrong segment of action would be on the screen. It took quite a while for the whole scene to come together. But come together it did. The briefing was successful and the Death Star was ultimately destroyed.

And what of the close call with the air conditioner at the last moment? Was the force with him? "I was pretty lucky," he says. ■



Computer schematic of the Deathstar trench created by Larry Cuba. Taken from precise measurements of the trench models, 40 seconds of this film involved over 12 hours of stop motion photography, triggered by the computer program.



Larry Cuba at the controls of the Vector General, while the embodiment of the opposing powers of the force seem to prepare for the final confrontation.

"WOOKIEE"

(continued from page 8)

you could see right through the characters onto the plate that had been shot previously. It was a ghost image, with the black background allowing a blank field so nothing would show up."

They used one frame per movement, which they said tended to give the little creatures a more fluid look. John explained that using more exposures per movement would have produced a more stroboscopic, or junkier effect. "We went for a more

mination of some 70 years of experimentation, the most impressive display of stop motion animation to date. John said there are very few good stop motion animators; it is a very specialized field. Both he and Phil list Ray Harryhausen and Jim Danforth as the best living practitioners of the technique. Harryhausen is an American filmmaker who works out of England, and Danforth is based in Hollywood. In fact, Phil currently is working on Danforth's latest picture, called "Time Gate." Phil said it's about a hunting expedition into the past . . . and it relies heavily on stop motion animation.

John and Phil said the market for their work is small, although *Star*

reality and unreality," Phil said. "If something looks artificial, yet is a structural and dynamic part of the film, you (the viewer) fit in with whatever illusion the filmmaker is trying to create. Today's audience tends to expect a great deal of realism from special effects, so maybe this technique is suited to the mass audience that's been educated to look at films in that particular way. But in basic filmmaking terms, it serves a function. It's the most viable way of making a prehistoric animal or a large animal ambling through the streets of New York, come off looking convincing."

He and John said a number of people are working on ways to com-

Star Wars has generated a great demand for their talents among advertisers anxious to capitalize on Star Wars' success.

natural, flowing kind of movement," said Phil, "yet we tried to imbue the characters with a mechanical feel so they weren't like real animals jumping around. In the script, they were supposed to be more like holographically projected images."

A camera normally shoots 24 frames per second, so with all those figures to manipulate, the process was extremely painstaking and back-breakingly tedious. Each two or three second shot of the chess board took close to 10 hours to produce. The whole segment, as it appeared in the film, was not more than 15 seconds long. Phil said the only thing which was edited out of the sequence, were two close-ups of two figures interacting with each other.

The cantina and the chess game were their major efforts, but Phil and John also worked on a few other minor segments. One of them, said Phil, "was working the little eyeball that pops up in the sewer."

Stop motion animation is not a new technique. Phil explained that it's been around since the inception of film in the early 1900s. Both John and Phil call "King Kong," which was released in 1933, the classic example of stop motion animation as applied to motion pictures. The technique was used extensively to manipulate the film's abundance of prehistoric animals. *Star Wars* is perhaps the cul-

Wars has done a lot to expand it. John says one reason stop motion animation is not used more frequently, is because of the time involved. Moving each limb of each character a fraction of an inch, a hundred different times, doesn't usually fit into tight production schedules. He says cost isn't that much of a factor, because "it's a very specialized, esoteric kind of thing" and if they want it, they're usually willing to pay for it." He and Phil generally charge \$150 per day, each, for their services.

Phil explained that the artificial look is caused by shooting one frame at a time. "Each particular frame," he said, "each motion, is very clean, as opposed to a live action shot. If you shot some live action stuff or a guy running down the street, you'd see a great deal of movement, kind of a blur coming off—trailing the guy's limbs, which are pushing forward very quickly. Stop motion animation can't create that effect, because each frame is so crystal clear. "As a consequence of that," said Phil, "the illusion, even though it might seem fluid, tends to have an unrealistic effect. The image has no blur on it. Because the entire movement is being interpreted through a person, you lose a great deal."

However, that odd artificiality can be very well suited to science fiction. "It tends to bridge the gap between

but the lack of realism in stop motion animation . . . and *Star Wars* was a big step forward. In the film's motion-control set-up, the space ships were shot with a lot of blurring in the frames, which added much fluidity to the overall effect. "But as far as puppet, or character animations where you have to be moving four or five limbs of one creature," Phil said, "it's hard to achieve the same thing." In his words, "There's no way of mechanically gauging how much to move limbs to create the effect which lends fluidity to movement on film. A lot of people are working on it, but their own techniques are pretty secret."

Even though stop motion animation is so highly specialized, neither John nor Phil have had any trouble getting work . . . even before *Star Wars*. Much of their work prior to the film was in TV commercials. In fact *Star Wars* has generated a great demand for their talents among advertisers anxious to capitalize on *Star Wars'* success. Phil had only worked on one feature film before he was approached by Lucas . . . a low budget picture directed by David Allen, who is now working for CPC and Associates on a film called "The Crater Lake Monster." John had never worked on a feature film before *Star Wars*. "What a way to start. Or, as he puts it, "What do I do after that?"



Illustration by ANGHELO

Steven Spielberg took the chance of his life and it paid off. Unbelievably, he has created a film of both childlike and adult innocence. *Close Encounters of the Third Kind* is the work of a master craftsman, what might be expected from the director of *Duel* and *Jaws*. The tone and pacing throughout creates an aura of suspense and mystery that unravels with the straightforwardness of a classic

detective novel. Enhanced by John Williams' perfectly accurate score, *CE3K* is a sensory delight of color, and sound and special effects magic which pays its respects to both Walt Disney and the intelligence of its audience.

From the opening sequence, in which the five Navy planes that disappeared in the Bermuda Triangle in the late 40s are discovered in mint

condition in the Sonora desert of Mexico, our attention is captured and tantalized. Though it is obvious that Spielberg has combined elements from many of the popular UFO pseudo-mysteries of the past few years, the audience remains voluntarily on his side. It knows almost immediately that we are on a journey of high adventure and immense discovery, but the feeling is one of



CLOSE ENCOUNTERS OF THE THIRD KIND

SPIELBERG AND THE ALIEN IDEA

Article by IRV KARCHMAR





Air traffic controllers crowd around the radar screen to track an unidentified flying object.

In Bombay, India (left below) LeCombe (François Truffaut) observes thousands of Hindus chanting a musical message from the stars.

joyous anticipation. Unlike the disturbing dread of *Jaws*, the audience can sense (even if most of the central characters cannot) that the final confrontation with unknown will be both awesome and beautiful; the vast, alien intelligence guiding the earthmen to the meeting place is surely benign.

Spielberg has implanted this feeling with great charm and intricacy, calling on our own special affection for the magic of Walt Disney in the guise of the little red ball of light that follows the larger scouting ships around like an unearthly Tinkerbell, and by placing the final meeting at the base of Devil's Tower mountain in Wyoming. When the immense mother ship finally appears over the mountain it fills the sky, evoking the memory of Satan unfolding his huge wings in *Fantasia* (even the mountains look alike).

From the 'logic' standpoint it is the alien concept that is also the most impressive part of the film. It answers all the questions asked directly within the film and subtly implies more.

For instance, when all the men and women reported mysteriously lost over the years come walking out of the mothership, they seem not to have aged. One scientist explains this as Einstein's theory of time slowing down when traveling at near-light speeds. This would also imply that the aliens could have been abducting people for hundreds of years; indeed, in one shadowy scene men in what look like military uniforms of different countries and past centuries walk off the ship. This is never expanded. All this is caught in passing but one would not have been surprised to see Amelia Earhardt and Judge Crater



walk off that ship together.

Also, one may conjecture on the mothership concept itself. The aliens are obviously thousands of years ahead of us in both technology and evolution, and perhaps their own world was dying. Their ship could be a self-contained world, waiting in

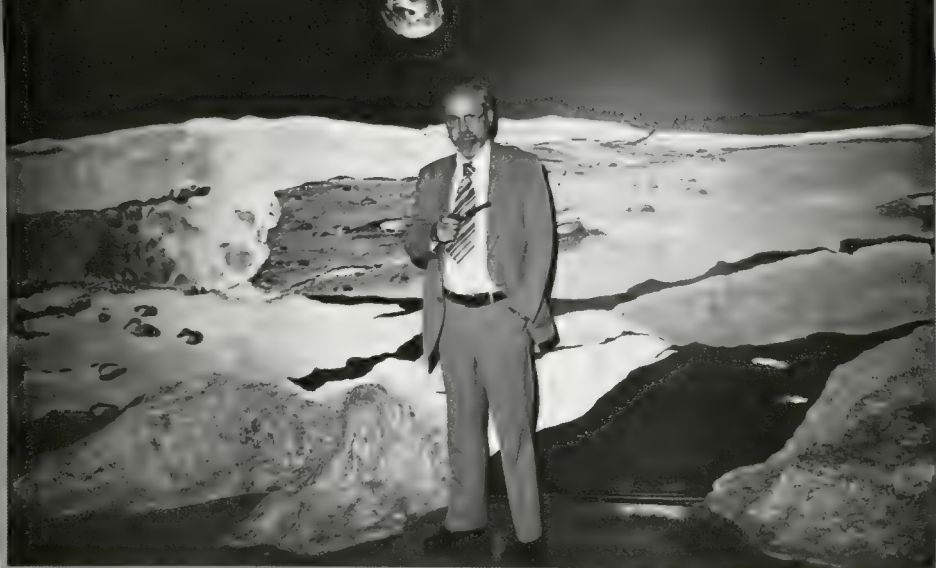
space for our civilization to advance sufficiently for them to establish contact without causing a worldwide panic or cultural shock. If this is the case, and they did indeed come back to earth every so often, pick up an isolated human or two to judge their level of advancement, it could explain why UFO's are seen in a cluster of sightings every few years.

Many such ideas cross the mind, all of which Spielberg, of course, intends. Even the alien leader (designed by Carlo Rambaldi, the great Italian FX designer who worked for Dino de Laurentis on *King Kong*) is a combination of features gathered out of a consensus of reports from those who have claimed close encounters of the third kind.

It is Spielberg's craft that makes all the elements work, and his belief in the childlike sense of wonder that each of us possesses that permits him to treat his audience with intelligence. Bravo!

Melinda Dillon as Jillian Guiler and Cary Guffey as her son, Barry, huddle together as all hell breaks loose in their home.





INTERVIEW

DR. J. ALLEN HYNEK

Dr. Josef Allen Hynek, who served as technical advisor and consultant on Close Encounters of the Third Kind, has been referred to as today's premiere authority on the UFO subject. He admits that, as a scientist (one of the world's foremost astronomers and astrophysicists), at first he was not a believer. Dr. Hynek states that his initial doubts began to disappear when he learned the phenomenon was global and not limited to the U.S. The facts that reports from distant countries were almost identical to those here, as to what they described, and the reputable sources of many reports—coming from airline pilots, trained radar operators, law officers, ministers, doctors and apparently reliable citizens, even from air and military bases—lead to his growing conviction. During his 22 years as scientific consultant to the United States Air Force on its Project Blue Book, the name given to investigative reported sightings, he began to feel the matter called for more study. He later became an outspoken critic of the Air Force's treatment of the question. Now, as Director of The Center for UFO Studies, he has become an activist in the fight to gain scientific legitimacy for the extraterrestrial phenomenon. According to the scientist, there are approximately 100 sightings worldwide in each 24 hours. More than 15 million Americans have reported seeing UFOs. He estimates that two to three million of these could not be explained. He also currently is Professor of Astronomy at Northwestern University, where he previously was director of the Lindheimer Astronomical Research Center and Chairman of the Department of Astronomy. Among his other high scientific positions have been those of associate director of the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts, head of its NASA-sponsored satellite tracking program, and director of Ohio State University's MacMillan Observatory. Hynek's "The UFO Experience, A Scientific Inquiry" defined the three classifications of UFO experience. In fact, it is from his definition that Spielberg took the title of "Close Encounters of the Third Kind". Hynek has defined them as follows:

Close Encounter of the First Kind—sighting of a UFO

Close Encounter of the Second Kind—physical evidence

Close Encounter of the Third Kind—actual contact with the occupants of a UFO

FF: When did you first become involved with *Close Encounters*? Were you contacted or did you contact them?

HYNEK: Well, I heard way back that someone in Hollywood was going to make a movie called *Close Encounters of the Third Kind*. I was puzzled and pleased. Then, I heard nothing

about it for a long while, and now I know why. Steve said he started on *Close Encounters* first, and then took time off to do *Jaws*. As he put it, they would never have let him make this picture if he hadn't made such a success of *Jaws*, which is clear. So it was very good timing. Then, again, I heard the movie was being made, and

I inquired as to who was making it. I then wrote a letter to Columbia Pictures saying that I was pleased to hear that my title was being used, and that if I could be of any service or so forth, fine. While it was not in any legal phrasology, they probably took it that I was getting a little antsy about the use of my title. So Steve called me

translate it into words which are picked up by someone's ears, who in turn must translate them. An awful lot is lost in that process. Maybe the aliens are showing us a way, a far more facile and legitimate way, of communicating. Now that again is based on some actual reports.

I've talked to many people who say they have communicated with ETs, and I'll ask them, "Did they talk your language?" Sometimes, yes, but much more frequently they'll say,

imagination, which is probably good. For instance, how long did Truffaut know that something was really going on? How long did it take to get the American government to fake the train wreck and all of that.

FF: Is there any actual military plan for a UFO landing—any rulebook pattern that will be followed if something ever does come up? Or come down?

HYNEK: None that I know of, but I think it would be very unusual if there

member of the Center. We would certainly get at least a sprinkling of crackpots and dingalings.

FF: Son of Sam from Outer Space.

HYNEK: That sort of stuff. You'd have people representing the Center talking about the trips they've taken to Venus and this and that, and there goes our credibility. The idea that I've always held from the very start is that I'd like to see the Center be to the world of UFO's what the Mayo Clinic is to the medical world. The Mayo

There must be a study someplace in the CIA, somewhere in the government; an instruction manual on what to do in the event of an alien landing of any kind, hostile or benign.

"No, I didn't know what they were saying, but I knew what they were saying." In other words, they knew what their thoughts were. Now the idea of a color and tone language is a way to dramatize things. You can't effectively present mental telepathy in a Hollywood movie. I think that Steve has done a very imaginative thing in portraying the communication. It may not necessarily be that way, but it's symbolic of a higher form of communication than we have.

FF: Was the alien in the film, who was shown briefly, a composite of actual accounts of aliens.

HYNEK: Yes, sort of a composite. And, of course, one thing that I think Steve achieved that is so different from *Jaws*, is that there is no audience terror here. In the actual context, it was benign—a message of love and understanding. This is something which hasn't appeared in UFO movies in the past. It has always been, "Get your guns out. An Invasion from Space! They're here to make charm bracelets out of us or something."

FF: Even though most of the characters didn't understand that, the audience seemed to sense immediately that these were benign creatures. They were perfectly friendly, there was no reason to fear them at all.

HYNEK: Yes, and I think it is a beautiful touch at the very end, just as the creature is about to go back, that it breaks into a tiny little smile. Just an instant, you see.

FF: Do you think the creature knew what he was doing when he was giving Francois Truffaut the hand signals in return?

HYNEK: Oh, let's hope so. Of course, the picture leaves an awful lot to one's

weren't. Certainly, there must be a study someplace in the CIA or somewhere. I should certainly think that somewhere in the government, there is an instruction manual as to what to do in the event of an alien landing of any kind, hostile or benign.

FF: Is your own Center for UFO Studies just an information center?

HYNEK: No, it has two very distinct objectives. We're interested in furthering both of them as funds become available. The main thing is to act as a focal point for those people interested in serious research on the subject. Margaret Mead has just joined our scientific board, for instance. And we have Claude Poher, who's head of the French UFO Commission.

He is one of the fairly high officers in the French NASA. He has now been given the responsibility of heading up the UFO Commission within the French Government. He's also a member of the Scientific Board of our center. Our center, unfortunately, suffers from lack of funds. We knew that we could get those funds by soliciting a popular membership. But we decided against it because it would mean that anyone who had ten bucks to join up could call himself a

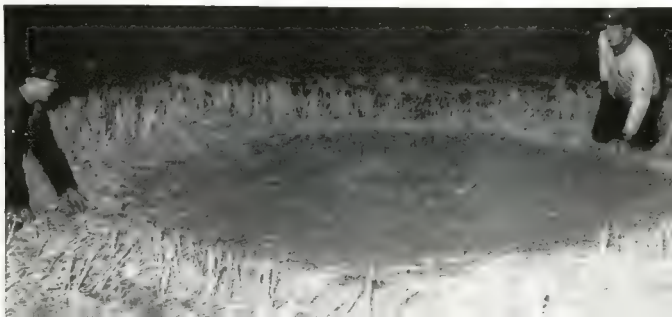
Clinic doesn't try to put hospitals out of business or anything like that. It's not in competition with anybody. It's handling tough problems. This is what I conceive the Center as being, and having as its board cooperating scientists from various universities. They're people who are associated with the Center in the same sense that a person might be associated with the Field Museum or associated with the British Museum. He can go there to do his research, to use our files and so forth, as long as it's for a serious purpose.

FF: It's all privately funded?

HYNEK: Entirely by contributions. Contributions are tax-deductible. It's a not-for-profit corporation. We have what we call contributors for \$10; donors are \$25; fellows are \$100; and patrons are \$1000. We actually have a few patrons.

What I want to have happen is that when we get a report that something has landed, I would like to have one or two people I could call on immediately. That would mean you'd have to be

The circular, scorched-earth print of a flying saucer. Its size might indicate a scout ship of some sort.



properly funded. They'd get out there, take the necessary samples, get them to the laboratory, conduct the proper tests. In other words, to do the job professionally.

FF: Have you any cooperative deals with universities across the country? Any stringers in different universities that can cover the United States?

HYNEK: Yes. As a matter of fact we have stringers in Los Alamos and Oak Ridge, but they have to stay pretty much undercover. For instance, Oak Ridge did a test for us one time and said, for God's sake, don't send us a letter thanking us. That will get into the bureaucracy, and they'll say what are you doing this sort of thing for?

The thing I'm hoping the picture will do is to make the idea of UFO's respectable, so that UFO is no longer a dirty word. So a person can say, "Yeah, I saw something that was pretty strange," without someone



The cruiser C57-D from Forbidden Planet. Is this the most perfect design for space travel?

saying, "What were you drinking?" Now, for every report that is made, I know damn well that there are probably two or three dozen reports that are never made for fear of ridicule. We've got to get that ridicule curtain down.

FF: What are your future plans?

HYNEK: This is my last year with Northwestern as a full professor. I have to retire. I'm going to be sixty-eight next year. That is the mandatory retiring age. I still, of course, can remain at Northwestern, but not in a teaching capacity. I can have office space. I can have facilities of one sort or another. But, I'm actually looking forward to retirement because then I can work full time at the Center.

I got intrigued by the problem, years ago, purely by accident. I just happened to be there when they needed an astronomer. I was teaching at Ohio State, which is close to Patterson Air Force Base. When the Air Technical Intelligence Center there got the job of trying to figure out something about the flying saucer reports, well, hell, they needed an astronomer to explain if the reports they were getting could be explained astronomically as meteors and this and that. So, I thought it was a lot of fun—getting a consulting fee, being in on the know, being on the inside, even though I thought it was crazy. It only took me a day or two a month, so I got into the habit of monitoring the thing. Each month for nearly twenty years I visited Patterson Air Force Base and looked over the reports that were coming in. So, I've seen all of the thirteen thousand reports. Most of them were junk, absolute junk.

The public is untutored in what it can see in the sky. But, there was always this residue of intriguing cases that I couldn't explain, and I had to say: either these people are utterly crazy . . . but it seemed hard to say that, for many of the reports came from military people, who were very well trained. In fact, my new book (*The Hynek UFO Report*) is essentially a resume of my work at the Air Force. That is where it all began. ■



Dr. Hynek in front of a moon shuttle exhibit at the Adler Planetarium, Chicago, Ill.



The Forerunners of CE3K

At root, Steven Spielberg's new blockbuster is not really about unidentified flying objects. It is a film of many facets, some of which are bright and sparkling, and some of which are slightly glazed from previous exposure. For one thing, it is another movie-movie, abounding in references great and small to older films, both SF and otherwise. It's a movie-goer's movie as well: for the first three-fourths of the picture, there is always something new happening on the screen—new events, new characters, new locales, new connections, a continuing sense of revelation, of puzzle-pieces falling into place. Thematically, it has its feet in many camps, and in the process it straddles a number of stylistic fences. For here we have a glossy, well-honed, impeccably produced *Believers'* movie, which now and again turns an ironic slap back at the audience, or descends to low comedy when wonder, terror, or anguish should suffice. This is definitely a movie with something to please everyone, with a little something adapted from a broad spectrum of commercial film-genres. And Spielberg's diversity of tone often has the audience laughing when it might otherwise be saddened, and applauding the *tour-de-force* special effects instead of truly reacting to them. Although it is a very sensual and even sensuous picture, it is not largely a visceral one. . . . much less so, in fact, than *2001*. Of course, as everyone has noticed, it is a much

more "human" movie: the characters are funny, irascible, engaging, even (that awful word) heartwarming. Perhaps a touch too heartwarming; they have warts, but even the warts



Steven Spielberg

are endearing. By and large, they are ideal just-plain-folks, carefully modeled, beautifully portrayed. And where dignified intelligence is required, we are served Francois Truffaut as the Distinguished Scientist.

For all that *Encounters* is a tremendous juggling act, Spielberg manages to keep it all going at once, and to keep a tight focus on the main story line. . . . the line that leads to a pre-ordained confab with the UFOs and their grandiose "Mother Ship." What happens then tends to dissipate the previous narrative tension, because Spielberg is left with the terrible choice of somehow achieving something original, or else satisfying the mind-sets of the multitude of UFO-enthusiasts. Hardcore science-fiction fans are certain to be just a bit disappointed by the finale, which expectably shows our ordinary hero, Roy Neary, ascending into heaven on the right hand of God. The previous

footage amply illuminates the classic adage that many are called but few are Chosen, and that the Chosen must be ready and willing (our heroine/his companion Jillian clearly states she is "not ready"). Also, the Chosen is always the choice of the gods, not of other men, so the handpicked elite cadre is left behind in favor of the man who made it to the top of the rock (or nearly) on his own. Having weathered the worst and done his maniacal best, he is obviously the one fit specimen, the one ambassador of humanity who may be allowed to enter the Kingdom of Heaven, like Moses, under his own power.

So at the close, the film becomes ostensibly religious, even Christian; at one point, a spidery humanoid emerges from the brilliant glow of the Mother Ship to spread its arms like Christ at the Last Supper. And all the aliens—large-domed, bald, naked—are like Star Children a *la* 2001, especially wrapped as they are in glimmering effulgence. As Roy approaches the entrance to the ship, he is engulfed in a transcendental bath of light, reinforcing the memory of 2001's famous transformation.

But at heart, this film is no more religious than it is cosmic. On the strictly commercial level, it is a holiday confection, a Christmas-spirit movie to make us all feel like brothers and sisters without ever a mention of brotherhood, race, or class. We see the "dead" released from "Heaven," welcomed back like



THIS ISLAND EARTH

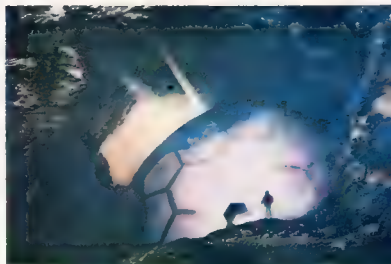
astronauts returned from the Moon—though they look rather like they've just awakened, and our scientists note that they haven't aged in the thirty-odd years since their disappearance. The final shots display a fairyland light-palace floating off into the starry night, a nonsectarian ornament to the year's end. Indeed, as a holiday feast, the movie bridges the gap between Christmas and Halloween. The beginning of the show introduces us to Jillian and her small son Barry, who are awakened by the sudden animation of all the electric toys in the house. From the way these are scattered everywhere, one gets the fleeting impression of the night after Christmas morn., of Babes-in-Toyland. But the lead-off toy is a grinning, cymbal-clapping monkey, which looms in the blue darkness like a strange imp before it comes alive. A furtive spotlight circle leads Barry out of his room and down the stairs. In the kitchen, we hear the refrigerator door crash open and then see the small avalanche that results. Bottles pop open over the initial flotsam as *something* escapes through the little cat-door in the back entrance.



EARTH VS. THE FLYING SAUCERS

UFOs? One might more readily think of a malicious brownie getting even for not being given his saucer of cream.

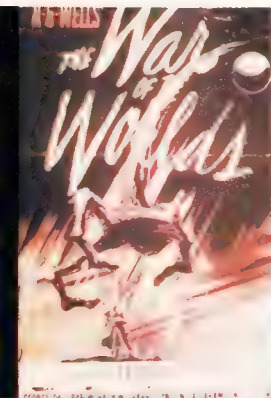
Shortly after Roy and Jillian meet, a squad of medium-size UFOs careens down a hilltop highway like so many blazing baroque jack-o-lanterns. Near the end of the picture, we again see similar, bright-eyed scouts floating from cover overhead, like inquisitive will-o-wisps; they sail over Roy and Jillian hiding in the rocks and than flash on piano-key grins. As Jillian says at mid-picture, "It's like Halloween for grown-ups." Really she means they are all waiting for another display of fireworks, something to light up both the sky and their plain lives. But her remark is cunningly apt: before they can say "trick or treat," the local authorities gather them up willy-nilly for a public debunking session. (And here Spielberg creates an ironic masterstroke that in itself is worthy of applause, but which seems to leave the general audience either a bit stunned or confused.)



IT CAME FROM OUTER SPACE

A second incident at Jillian's home takes on the character of angry poltergeists, with cupboards flying open, plates and utensils crashing about, a menacing vacuum-sweeper, and even the *screws* emerging from a floor-vent as *something* persistently tries to get in, and young Barry persistently tries to greet it, tries to get out. On the telephone plays the mysterious pied-piper melody that attracted thousands of tribesmen in India. And a glimpse out the front door reveals two white-hot wheels hovering in a yellow-orange glare. Fiery salamanders, or the wheels of Ezekiel? Angels or devils? Jillian knows not, knows only terror, and that they are trying to steal her child . . . a feat soon accomplished as he is pulled from her hands through the cat-door. She rushes out to see balls of light disappear into the rolling clouds from whence they came.

So the UFOs consistently partake more of folklore and superstition than of alien visitation. They are capricious, like playful demons, leading police a merry chase until the moment they ascend into the sky to disappear in a crackle of heat lightn-



A representative selection of 1950's alien encounter poster art.



In an early scene from *CLOSE ENCOUNTERS OF THE THIRD KIND*, Richard Dreyfuss, an Indiana power repairman, finds himself in the center of an awesome mystery centered about the sighting of Unidentified Flying Objects.

ing. And as soon as they do, a power blackout in Muncie, Indiana, ends like the lifting of some medieval spell. Always they are seen to emerge from preternaturally billowing cloud banks, which always portend their coming. Even at the finale, they do not descend from the deep blue sky of Arizona, but first lay down a ring of clouds about the summit of Devil's Tower, as if to proclaim this their Olympus. Quintessentially, until the final meeting with the Mother Ship, they appear as Spirits of the Upper Air, creatures of myth for all their glowing geometric nicety. The sky is their home, but not necessarily the stars. While special-project scientists attempt to correlate various strange phenomena and thus track down beings from space, the ordinary mortals seem to battle with elemental, animistic forces.

Special-effects man Trumbull has compared his work here to the momentous appearance of the tornado in MGM's *Wizard of Oz*. In truth, the impact and essence is more closely related to the dark storm over the Red Sea in *The Ten Commandments*. In a clever cinematic aside, Spielberg shows the Neary family viewing the deMille epic on TV when we first meet them.

Banished entirely from the action are the gleaming silver discs of the Fifties . . . except for a single photograph held up by a Major at the public Air Force briefing. "This is a flying saucer," he says. Replacing the photo with a metal dish, he continues, "It's made of pewter, and it was photographed in my backyard." Thus Spielberg apparently disposes of the



Douglas Trumbull, best known for his special photographic effects for 2001: A Space Odyssey, brings his creativity to the screen again as visual effects coordinator for CE3K.

likes of George Adamski and Truman Bethurum, stalwarts of that earlier decade, as well as neatly hinting at official misdirection. Part of the beauty of the film is that it hands out jolts to both Believer and skeptic, making each ask (one hopes), "What did I just see? What did I expect to see? What should I believe?" For all its seeming acceptance of UFOs, aliens, and Bermuda-triangle mysteries, *Close Encounters* still has room for an occasional sly wink at the cynics, and a touch of fairy-tale whimsy. In the mad chase of UFOs along the highway, the phalanx of electric goblins is trailed by a diminutive red spot, a kind of tinkerbelt tag-along. The phalanx crashed through a toll plaza to negligible effect . . . to be followed by the laggard spot, which sets off alarms and seems to split in three as it passes through the gates. Earlier we are shown that, as ordinary things are often taken for UFOs, so a genuine UFO might be mistaken in the dark for an ordinary auto. The point is that headlights can be deceiving, no matter their ownership . . . and this point is made several times, in different ways, in the course of the film.

Beyond the razzle-dazzle of special effects, there is much else to hold the attention of the audience. Of course, the continual change of scene and characters in the first half keeps one hopping mentally. But the movie also has a wide range of appeal in that it tends to subsume other action-film types, or at least pieces of them here and there. There are car chases and escapades for the *Bullitt* fans, paramilitary maneuvers with disguised



The reptilian Yimr from *20,000 Miles To Earth* runs amok since growing to monstrous proportions because of the change in environment.

vehicles for the *Mission: Impossible* "caper" freaks, and such like.


There is also a fair amount of *homage*, like the scene where Jillian gives Roy a hand up the mountain, reprising (with role reversal) a similar shot of Cary Grant and Eva Maria Saint in *North By Northwest*. The Mother Ship's tutelary display of music and modulated light evokes (for me) another bit of Disney—the "onstage soundtrack" from *Fantasia*. Already noted is the reference to (and use of) deMille's *Ten Commandments*, which is almost a science fiction film itself.

With regard to bona fide SF films, the references and pastiches are multifarious. The scintillant, latticework belly of the Mother Ship strongly recalls the corridors of light from *2001*. Even more blatant, somehow, is our protagonists' first sighting of Devil's Tower: as they climb a hummock, it is revealed as a grandly rising monolith . . . a combination of *2001*-style effects. Later, the Mother Ship makes its first appearance *rising* (not descending) behind the lesser bulk of Devil's Tower, very reminiscent of the way the giant saucer in *This Island*



The alien being of CE3K, which was envisioned from a composite of reported alien encounters.

Earth rose from behind a hilltop mansion. If strange events along a dark highway don't remind the viewer of *It Came From Outer Space*, then at least the *Close Encounters* poster/ad/program-cover should. We even have extremities of overlapping dialog around radar screeners, straight out of *The Thing*. However, in major detail and broad outline, the present film bears little resemblance to the saucer films of the Fifties, most of which projected menace and destruction by alien invaders/infiltrators. Even *The Day the Earth Stood Still* and *It Came from Outer Space*, which characterized aliens ultimately as reasonable folks, had their quota of deadly menace (in the first, the implacable robot Gort). The latter film was positively gothic up to its climax. Even in the midst of the most eerie and violent occurrences, *Encounters* is nowhere near as spooky, and its ostensible final message is that the aliens are here to be *friendly*. Why their minions act so very odd in the beginning is a question that is never answered; perhaps we are to assume that aliens work wonders in mysterious ways, or that they eventually



we are not alone

ARTWORK BY EARL HOKENS ALL CHARACTERS ILLUSTRATED FROM STARWARS AND THE DAY THE EARTH STOOD STILL © 1977, 1951 BY TWENTIETH CENTURY FOX CORPORATION. ALL RIGHTS RESERVED. CHARACTERS ILLUSTRATED FROM CLOSE ENCOUNTERS OF THE THIRD KIND © COLUMBIA PICTURES INDUSTRIES, INC., 1977.

overcome the problem of *their* technology playing hob with *ours*. In any case, the final meeting is smooth and peaceful in all ways, if one may discount the singular resonance-shattering of a tower window.

But is this all the film is really

to save the child from being hit by Roy Neary's oncoming truck. This immediately leads to the automatic "Gee, I'm sorry, lady, I didn't even see him!"—hardly the thing to win favor with devoted young motherhood. Later on, Roy and Jillian must recog-

... and it is something less, and more, than love.

For what this picture is about on the most down-to-earth level is the psychology of shared experience, and the social consequences thereof. People may or may not fall in love... but undergoing a common, compelling experience, a unique experience shared only between *them*, can bind them as surely as any marriage... *more* surely, in the face of what happens between Roy and his wife Ronnie. When Roy drags Ronnie out to the road to see the strange things that are no longer there, things he cannot even describe to her coherently, she eventually asks him, very calmly, "Don't you think I'm taking this very well?" They do not argue then, but of course it's all downhill thereafter.

Only somewhat secondarily, the movie explores obsessive behavior, obsession unto madness. In Jillian, a graphic artist, the selfsame implanted obsession has a relatively easy outlet. She begins to draw mountains, page after page, always dissatisfied, but presumably making slow progress (like any artist) toward the internal ideal. Roy, however, has no such convenient mechanism of expression, and the compulsive mystery builds and grows in him as he must find a way merely to deal with it. When he tries at last to sculpt it in clay, he encounters the frustration inherent in exercising dormant faculties, and it dramatically leads him to rage—rage at the clay, rage at himself, rage at the universe for giving him this burden. When the drive to recreate the obsessive object occupies him fully, he goes crazy, tragi-comically re-ordering his existence around the object's complete and perfect construction. Spielberg treats this sequence with an abundance of situational humor, perhaps to mock our conventional ideas of relative sanity. Ultimately, our hero's resourceful madness leaves him better prepared to cope with his real mission than any other contactee, though it leaves his living-room and his life a shambles.

On the whole, *Close Encounters* is a crisp, entertaining movie, a movie with lots of verve, which falters at the end by virtue of trying too hard—trying too hard to impress, to astound, to blast the audience with wonder and delight. In a way it succeeds in this, but only, really, on the surface, and in the spirit of the holiday season. ■



A rare shot of the alien from *War Of The Worlds* is an interesting concept of otherworldly life.

about? A series of confrontations with the unknown and inexplicable, leading up to a handclasp among the stars and—maybe—a specimen apotheosis? *Newsweek* writer Jack Kroll lauds Spielberg's "humanistic vision" and the film's many human touches. A few of these "touches" are movie clichés that the film clutches lovingly to its celluloid bosom. For instance, the last-moment leap across the road

nize and dash toward each other through a milling crowd of evacuees, just as Jillian is being bundled aboard the train by an officious MP. This scene ends in the inevitable clinch, which saves Jillian from the galumphing trooper. But it also establishes the dominant tone of the picture. They greet each other fervently, and we cannot hear their words, but we clearly witness their mutual intensity

THE DAY THE EARTH STOOD STILL

The Film and the Times
Retrospective by JAY STOCK



The year prior to the release of the film *The Day the Earth Stood Still* was probably one of the most troubled America has ever seen.

Not that there were so many more young men lost in the war, (any war); or that the economy was nosediving at any greater speed; or that corrupt politicians were stealing from, and lying to, their constituents any more than they had been. America in 1951 faced several dilemmas of crisis proportions; the real start of the *Nuclear Age*.

The U.S. had possessed the 'atom bomb' and all its trappings for more than half a decade. By January 1951 the U.S.S.R. had successfully tested, above ground, at least one nuclear device. The threat of nuclear holocaust had suddenly become very real.

Not only was the 'bomb' a big scare item, the start of 1951 found the U.S. deeply engaged in the Korean war. The headlines of the *Chicago Daily Tribune* were filled with bleak war news, headlines like: "CHINESE ROUT ONE DIVISION AND ADVANCE SEVERAL MILES," "REDS HAMMER 20 MILE FRONT IN SEOUL AREA, Hordes Pour Through Yank Defenses."

The 'bomb' and the 'war' weren't the only major concerns of America in 1951. An awful disease had infected



Gort (above) at the controls of the device that will revive Klaatu after he was shot and thought dead by earth soldiers. Klaatu (below) falls after being shot by a panicky soldier in the beginning of the film.

the country and it wasn't the kind that you take two aspirins and go to bed for. It was a cancerous social disease that most citizens believed would gnaw away at their freedoms and rot their moral fiber until it made them its slave. Senator Joe McCarthy had not yet splashed anti-communism all over the media, but even without Senator Joe, anti-communist propaganda was everywhere and it oftentimes went to extremes. A half-page ad for Illinois Bell Telephone in the May 22, 1951 *Chicago Daily Tribune* reads: "What do telephone capitalists look like?" Below the large caption are several pictures of happy Illinois Bell employees in work situations. The ad further states "19,000 Illinois Bell em-

ployees are among the *million owners of the business.*" The ad clearly implies that under communism, these 'owner-employees' wouldn't have it so good.

Let us step back from all this a moment and address the present.

We still live in the fear of nuclear holocaust. Korea and Viet Nam didn't teach us that with a stockpile of nuclear weapons it's unnecessary to shoot individuals. We still have to worry about corrupt politicians, one would tend to think, with the lessons we've recently learned the hard way, that 'we' should be adept at choosing honest political leaders. 'We' certainly have had enough bad examples to learn from.

It doesn't appear that we've learned much about 'defense' or 'politicians' since 1951.

America has made some astounding technological advances since then, but how far have we progressed sociologically?

In the November 18, 1977 episode of *The New Adventures of Wonder Woman* (CBS), a mad physicist (Roddy McDowell) tries to enforce world peace by threatening the world with total annihilation. Sound familiar? This isn't the only variation of the theme. Take a look at *Our Man Flint*

(continued on page 48)



The Language of KLAATU

Linguistic Analysis
By TAUNA LE MARBE



Translating the language of Klaatu and presumably a great portion of his home planet, presented an interesting challenge. It might have been all gibberish, simply made to sound intelligible for the film audience. Imagine our surprise, therefore, when we gave it to our Alien Linguistics Editor, Tauna Le Marbe, and she did indeed discover that it actually was translatable.

Apparently it is a combination of Latin, French, English, Greek, Cipher, and transposition code that took her almost fifteen full hours to decipher.

Because there are so many Earth root languages involved, the speculation may be raised that Klaatu's race once 'seeded' our world with much of its present population. Or, that in the far distant past we may have had the same ancestors, from beyond the reaches of even Klaatu's spaceship, who seeded both worlds. It would account for his totally human characteristics in any event.

THE LANGUAGE

All four communications that are known to have been spoken by Klaatu (and in one case repeated by Mrs. Helen Benson) are as follows, in order of their occurrence. A brief description precedes each and a commentary follows. These communications were all vocally expressed, and therefore their conversion to our own language has been done on a phonetic basis.

First known communication: On the first day of the saucer landing Klaatu was shot by an impulsive and panicky soldier. He then made the following statement to the robot Gort as Gort was immobilizing various military weapons and vehicles:

Phonetic Sounds	Word Origins	Literal Translation	Free Translation
DE KLENZO	DECLENZO	Disengage	Please stop shooting.
GROSGO	GROSGUITO	Force Voluntarily	

It is interesting that this is a request to Gort, not an order, and seems to indicate that the machine has some 'free choice' in its own actions.

* * *

Second communication: Several days after Klaatu's escape from Walter Reed Hospital the following transmission was detected. On the following day, all electrical power (with the exceptions of hospitals, airplanes in flight, etc.) was disrupted for one half hour, starting at noon.

Phonetic Sounds	Word Origins	Literal Translation	Free Translation
EM-ER-A KLA TOO NARRO-aunt	EMOERA KLAATU NARROANTE	Are from Commander report as agreed previously.	I am me, Commander, reporting as previously arranged.
MAKRO PRO VOU VER-ATSO LUKp-TRENX	MACRO PRO-VEHO VERRETOU LUKTERANSE (LOPHRENXIS)	Send large force from lens that churns earth's poles on axis.	Will send appropriate force from apparatus to effect earth's magnetic field.
SO-M-FIT-NCE DE-BRATSO T'SARE AXO	Soimfferitensex DIESBRAU TOUSARIE AXO	Wise apart from the innocent, on the day at the appointed time, for a short time, stop everything, when the sun is at it's center of the heavens.	At noon stop everything, for a short time, with the exception of emer- gency installations and planes in flight.
B'DIRT-SO VORENDGE DA-Gis	BEDERTSO VOIRRANDRE DAGUS	Whether upset enough, to witness and give verdict to change, in ac- cordance with the promise of re- demption is the question?	Whether witnessing our strength will convince them to change their ways, and thus save themselves, remains to be seen.

The significance of this translation is indeed important considering what later transpires. It also lends support to the theory on "how" the earth was made to "stand still."

Third communication: This was made directly to Mrs. Benson by Klaatu when he had cause to feel something might happen to him. He requested that if something did indeed happen, she go to Gort and make this statement.

Phonetic Sounds	Word Origins	Literal Translation	Free Translation
KLA-TOO Bar-a-da NIK-Toe	KLAATU BARADA NECTO	Stop Barbarism (I have) death, bind.	I die, repair me, do not retaliate.

That Klaatu's civilization had discovered some of the secrets of life and death is staggering. When she asked Klaatu what the robot could do without him, Klaatu told Mrs. Benson, "There is no limit to what he can do . . . he could destroy the Earth."

Fourth communication: This was given to Gort by the newly rejuvenated Klaatu. While it had all the appearance of an order, it translates to be a request. This makes sense in light of Klaatu's inference that Gort had free will in cases that would call for punishment of aggressors.

Phonetic Sounds	Word Origins	Literal Translation	Free Translation
g-ORT v-OR-N-DGA	GORT VOIRAENDGRE	Centurian, Witness and give verdict (to leave).	Soldier, I am ready to leave, are you?

It is also interesting to note that the word Klaatu is also an encoded form of HARRY B., which would stand for Harry Bates, the author of the original story on which the film was based, "Farewell to the Master."

APPENDIX

Glossary of Terms and Abbreviations to the Alphabet That Follows.

- Anglo-Saxon—(AnSx) Word origin.
Cipher—(Cfr) A method that systematically disarranges the normal order of letters of a plain text.
Clear—(Clr) Communication after it has been transcribed back into the plain text.
Code—(Cd) Groups of letters substituted for plain text letters or syllables.
French—(Fr) Word origin.
Greek—(Gr) Word origin.
Intercept—(Ncp) The deciphering or decoding when done by a person other than for whom the cipher or code was intended.
Latin—(L) Word origin.
Obsolete—(obs) Word origin.
Phonetic-transposition-code—(Ptc) One in which the letters for sounds remain the same as in the clear, but are rearranged to a particular pattern. i.d., back to front.
Plain text—(Pt) Words as they are before encoding or enciphering.
Translation—(Tr) Converting thought patterns from one language to another.

VOCABULARY

Caelumi-Axi-Gentis Nord/English

- Ada (L) suffix, to stop
-Ante (L) suffix, as before, formerly, previously
Aratta, erret (Fr) to churn, that churns
Axi, axo (L) sky, pole of the heavens, center
Bar- (L) foreigner, barbarian
Barada (L) stop barbarianism, (you)
Be (L) whether enough or not
Bedertso (L) whether or not enough upset to realize importance
Brau (Fr) bras, to stir up (L) pravo, to distort
Caelumi (L) sky world
Dagus (Fr) degages, bond promise of redemption, release
Declenso (L) declension, bending aside (Fr) De'Kleinsme, to disengage, to set in motion, to launch
Dert (L) desero, join, desert, forsake
Dia, Dies (L) interval, appointed time, on day at the
Diesbrau (L) distort for a short period at appointed time
Em (Ptc), (Pt) Me (L) me, from, with, by
Emoere (Fr) bring forth from, (Ptc) era (Pt) are
Endgre (L) to, collect, attach, prepare
Entis (L) wise
Gentis (L) Nation
Gort (L) from Vorenus, centurian (Pt) proper name
Grosquito (Fr) tuito voluntarily (L) Force
Hre (Ptc) Erh (Pt) Earth
Immerferitensx, sex, infitentis (L) immeritus, innocent entis, wise
Klaatu (Ncp) 'Harryb', Harry Bates, writer of "Farewell to the Master" (AnSx) Commander (Cd) harry (obs) to agitate to worry, to make a predatory incursion
Lop (Ptc) pol (Pt) pole, center
Lophrenxis (Ptc) erh pol n xis (Pt) earth's pole on axis
Lu (Fr) light
Lukterrane (Fr) light between earth and another
Macro (Gr) Makros, long, large, great
n- (Ptc) on
Narro (L) report, relate, describe
Narroante (L) report as previously agreed
Necto (L) Neco-atus, death, kill, slay (Fr) necto, to bind, entwine (Ptc), (Pt) bring back to life
Nord (Fr) North (Ptc) Edmund H. North, screenplay
Pro (L) carry forward, send, bring
Pro-veho (L) send 'the' force
Randre (Fr) to give verdict to, to translate (you)
Rendgre, raendgre (L) they give verdict
so, se (L) if or whether, apart
soimferitensx, soimfentis (L) in wisdom separate the innocent from the otherwise
terrani (L) earth
Tou, tsa (Fr) suffix, many much
Tous (Fr) whole, everything
Touarri, -araia (L) everything with strong current
Tuito (Fr) voluntarily
Veho (Fr) vix, vox, you, force
Verre (Fr) glass, lens
Verretou, -so (Fr) lens or crystal causing much variation
Verrendre (Fr) to witness and give verdict to exist, whether to survive
Vairaendgre (Fr) to witness and give verdict to leave, prepare gather
Xis (Ptc) xis (Pt) Axis, center

THE DAY THE EARTH STOOD STILL

(continued from page 45)

and you'll see the basic plot recur. The only difference is that in *TDTESS*, Klaatu isn't a mad scientist, he's a benevolent alien. It seems that, even 27 years later, the basic plot is still usable.

Again, let's step aside. Examine Klaatu's purpose. Total disarmament

might be a nice idea in a world where only a few very large powers are capable of building a nuclear device. But this is 1978, and high school students are taught the basic principles of nuclear fission in their chemistry classes. We live in a world where any terrorist with the wherewithal to collect a small amount of reactor waste can assemble a tidy little 'A-bomb.' Would Klaatu's message be effective to the Baader-Mienhoff terrorist gang or the S.L.A.?

Today, as in 1951, the Korium nuclear devices left by Klaatu are still buried under the polar caps. We

haven't lost the tensions and anxieties conceived by the Korean War, gestated by the Cold War, birthed by the Bay of Pigs, suckled by the Cuban Missile Crisis, weaned by Viet Nam and the surrounding political protests, fed and clothed by the 7 day Arab-Israeli War, raised to adolescence by Cyprus and the terrorism of the early 70's and turned to juvenile delinquency by Richard M. Nixon.

Our good friend Klaatu would be heartbroken at the lack of real progress we've made since he first came to visit in 1951. We seem to be intent on finding new and better ways to hurt and kill our fellow humans.

Annihilation does not seem to frighten us. We've been given several glimpses of what a post-holocaust earth might look like. *The Time Machine*, *Planet of the Apes*, *A Boy and His Dog*, *Logan's Run* and *Damnation Alley* each give us a not-too-pretty picture of the future; and we still plod forward, never heeding kind Klaatu's message.

On October 3, 1951, a week or so before the midwest premier of *TDTESS*, Phillip C. Jessup, top aide to State Secretary Acheson, was accused of sponsoring a proposal in Feb. 1946, which was hazardous to 'American Security.' Senator Brewster (R. Me), a member of the Senate's Foreign Relations Subcommittee, considering Jessup's fitness as the American delegate to the United Nations general assembly in Paris, questioned Jessup at length about his proposal, with other Columbia University professors in Feb. 1946. The proposal was: that the U.S. manufacture of the atom bomb should be stopped for a year pending negotiations for an international control system. Jessup said that this could possibly be followed by "dumping the atomic stockpile into the ocean."

Although Jessup was branded a 'commie sympathizer' by Senators Brewster, McCarthy (R. Wisc.) and the media, it's more likely that he was just a friend of Klaatu's. It's surprising to find that Klaatu wasn't branded a 'commie.' From all appearances, *TDTESS* received no government censure. All research indicates that it received a widely advertized gala premier. Maybe it was due to the fact that *TDTESS* is SF and the "strange men and demonic machines from a distant planet" bore no real threat to 'American Security.'

Gort?

Klaatu?

Dammit, where are you?



A Walter Winchell-type television reporter broadcasts a photo of Klaatu, now a wanted alien man.

GUARDIAN
PATROL CRAFT CLASS
FICTIONAL DISBURSE

TOP SECRET

Mystery of the Seamless Saucer

Theory By M. DARKTOWER

IT IS NOT MAGIC, BUT THE PRODUCT OF AN ADVANCED TECHNOLOGY

Mechanically and scientifically, the starship of Klaatu, (or Gort) was superb. It was made of some substance that ignored the strongest acids and reagents, snubbed diamond drills and was impervious to cutting torches. The hatches and landing ramp were so finely machined and fitted that the seams were undetectable. It could cross inter-planetary distances readily and regularly, and probably could handle intra-system jumps (though it may 'only' have been an in-system shuttle) and traverse Earth's atmosphere at speeds greater than mach 4.5. It could also hover like a multi-ton hummingbird and land like a feather. No landing or launch support complexes were used, such as our multi-stage rockets require.

So, how did it work? What can be

discovered by studying its design as shown in the film?

Consider the wide annular ring between the outer hull and the inner pilot's compartment. This donut shaped corridor seems to have no real function in terms of our own spacecraft. It would seem a lot more economical to just go from the outer hull to the inner chamber and not waste the space. But, what if the corridor

was filled with some sort of anti-radiation shield during flight. Generating machinery could be placed in the hull walls and floor and utilize the space like the vacuum tunnel in a nuclear particle accelerator. Or, it might be used as a place to put a giga-gauss magnetic field to deflect radiation and particles. This would allow the pilot to control and channel the deadly radiation of solar storms around or away from himself. It would also allow him to rotate a circular or toroidal field around the pilot's capsule to any direction necessary for maximum shielding, regardless of the vessel's direction of flight. Or, one could just leave the field in the ring, and angle the ship itself to maximize the shielding effect, with the ship's drive allowing the vessel to progress in any di-



rection, regardless of the orientation of the ship.

The ship's drive could be a system that manipulates the magnetic or gravitic fields around it—those of the planets and Sun—and move through them like a boat swimming through water. The disc shape is perfectly suited for housing a monstrous ring magnet or super-conducting ring. This could provide enough field to let the whole ship float on Earth's geomagnetic field like a flock of iron in the field of a balanced electromagnet.

This giant ring could also be a part of the ship's power system, possibly acting as the 'Bottle' for a huge fusion plant harnessing the enormous power of the sun directly. Or it might serve as part of some system for converting matter to energy in wholesale quantities—reducing anything thrown into it to free energy and radiation. This system would give it efficiency and potential power unimaginable to modern power plant engineers. Our modern 'efficient' nuclear plants convert only a tiny fraction of one percent of the uranium

to take this ship to the outer planets, possibly the stars.

How could the designers of the ship incorporate the ramp Klaatu and Gort used to get in and out of their ship? It was large, and would have taken up a great deal of space in what was probably the main power ring of the ship if it simply extended and retracted as one or two large pieces. More likely, the ramp was simply a portion of the ship's armour that was 'taught' molecularly to extrude from the hull on command. Memory plastics today can be set into one specific shape which they will retain as coding on the molecules themselves. They can then be bent or stretched, or pressed into another shape while hot, and then cooled. They will maintain this shape for a long time, unless heated up

Earthlings, should any get inside. They would also be immune to accidental activation by anything floating around in freefall. It would be embarrassing to have an un-secured helmet, for instance, activate the ship's gunnery equipment at the wrong time and leave a large hole in someone's world.

But the greatest marvel was the regeneration equipment that seemed to bring Klaatu back to life. Science is coming to the belief that all living things have an 'aura' or bio-field around and inter-penetrating themselves, like the FORCE of "Star Wars." Kirillian photography can record these fields, but no one can quite explain them. Perhaps they are electromagnetic envelopes of living energy, the 'life' of each thing, and can be re-

"it could hover like a hummingbird and land like a feather"

again. *Then they return to the shape they were originally 'taught'.*

The hull could be like this memory plastic; taught two different positions, it could go from one to the other on command. It could be a ramp or hull section, and there would be no seams to detect.

The magical controls of the ship were also delightful. There were no moving parts to wear out, probably being keyed to respond to Klaatu's hands only, to his bio-field, or bodily aura; his Kirillian field, if you will. That would make them handily immune to manipulation by primitives, like

inforced by some outside agency, like giving the body a transfusion by applying more of the basic energy frequencies that sustain life in this material universe. Thusly, Klaatu's ebbing life field could have been restored, temporarily, allowing his spirit to return and complete its mission.

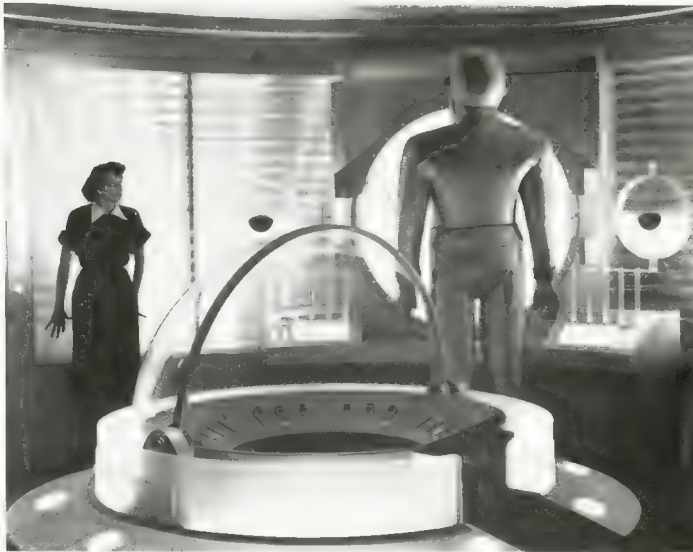
Or, it may have been a device that could instantaneously regenerate body tissue, even those brain cells destroyed when Klaatu's blood ceased to supply them with oxygen (assuming Klaatu breathed oxygen).

All in all, a most practical magic concept. ■



Gort carries Helen Benson (Patricia Neal) through the outer ring of the ship (above). He then activates the controls that will bring Klaatu back into existence (right).

used to fuel them into energy. The most efficient fusion- or H-bomb-also uses only a tiny fraction of its mass. Direct conversion would allow a thimble of lead to provide the power



TOP SECRET

GUARDIAN PATROL CRAFT 01190 PICTORIAL DIAGRAM



This Diagram is intended mainly to help the interested Citizen of the Union to understand a bit about the structure of one of the standard 'Guardian Patrol Craft' to which we owe our peaceful existence. Together with its GORT component, this Craft has deterred interworld violence for long ages following the Great Conflict. It is also responsible for the removal from the plane of Current Existence one or two worlds that were totally unable to exist in peace with others.

The unusual size of the Fusion Power Torus should be noted. While the craft itself does not normally require such large amounts of power, the massive reserve capability is necessary for the operation of the 'Planet Killer' Fusion Trigger. This device, as is known to all, merely begins a fusion reaction in the atmosphere of a target world, turning it into a brief, but excellent, sun. Its effectiveness is matched by its scarcity of use.

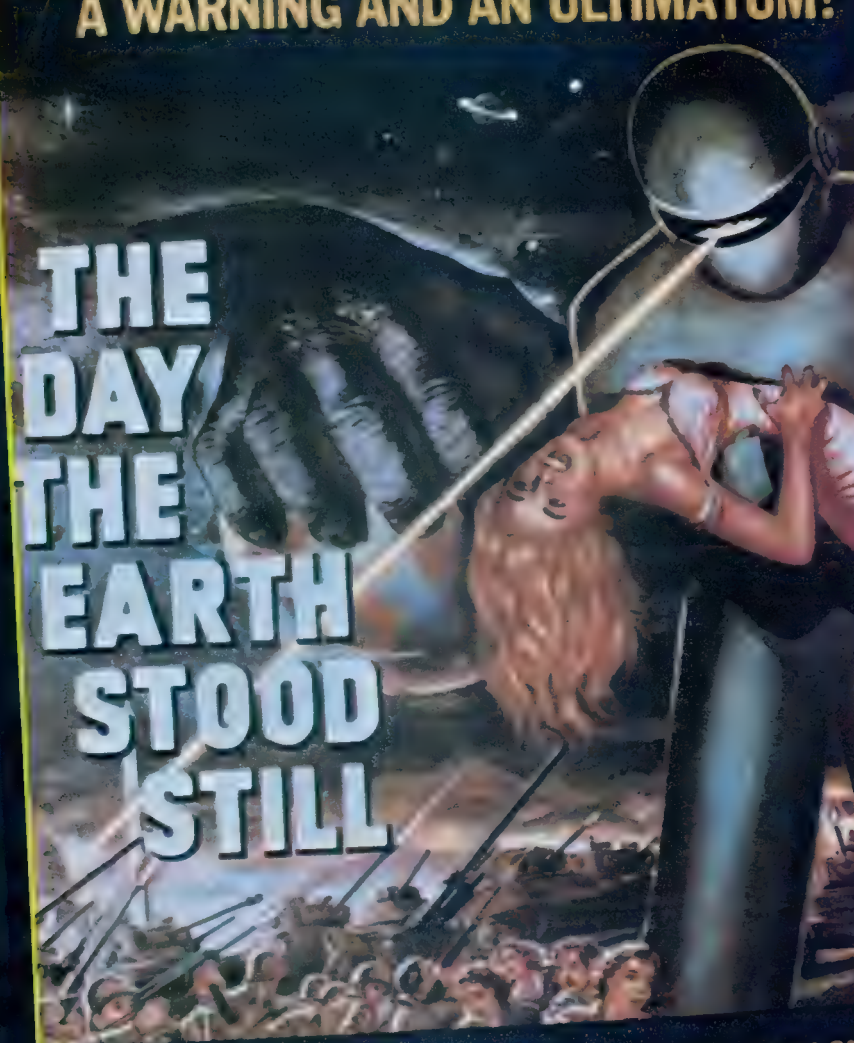
Other details may be of particular interest to those Citizens desiring to become Contact Specialists. The entire top portion of the craft is particular to only the First Contact type of vessel. Such equipment is useful only to a living being, and the GORT unit in the form of whatever type of being is to be contacted.

The boarding ramp is handy for most life-forms, as is the large main hatch. The Bio-field Reinforcement, food preparation and sanitation arrangements, and the manual flight control and protection capsule are solely for the use of the living part of the 'crew', and are adapted for that life form and GORT using them.

Most Guardian Craft simply have the standard Arachno-form GORT unit tucked neatly out of the way in the main disc unit, which is used only for odd maintenance or field work.

**FROM OUT OF SPACE....
A WARNING AND AN ULTIMATUM!**

THE DAY THE EARTH STOOD STILL

A vintage movie poster for the 1951 film 'The Day the Earth Stood Still'. The central image depicts a massive, grey, tentacle-like alien with a large, reflective, dome-shaped helmet. A powerful beam of white light emanates from the helmet, shining down on a woman with long blonde hair who is being held by a man in a dark suit. In the background, a city is shown at night, with numerous searchlights and spotlights directed upwards towards the alien. The overall tone is dramatic and suspenseful.

MICHAEL RENNIE · PATRICIA NEAL · HUGH MARLOWE

MILAN BLAUSS · ROBERT WISE · EDMUND H. NORTH

20



THE ORIGINAL STORY AND THE FINAL FILM

CRITIQUE BY TERRY PARKER

The Day the Earth Stood Still has attracted superlatives since it first appeared a quarter of a century ago, and anyone of any age who has seen it once has probably seen it twice. It is easy to watch time and time again, one of the few films that is referred to with, "I've seen that so many times," by so many people. It is a film rich in sensual elaboration.

Yet as a film, it is further removed from the short story that was its source than one would expect for it to be so effective.

Harry Bates' *Farewell to the Master* is part of the legacy of *Astounding* during the period when John W. Campbell, Jr. was its editor, and it typically presents the reader with a future culture replete with an advanced utilitarian technology. It is a society serviced by robot attendants, and armies use such exotic weaponry

as Mikton ray guns. This is clearly not the culture of the Cold War and McCarthy that is so apparent in the film.

We are given just enough technological anomalies to establish a near future, not so far removed from the present to preclude radio, television and newspapers. Although humanity has spread throughout the Solar System, our capabilities are not yet formidable enough to soften the shock of the sudden and instantaneous appearance of the traveler—a time-space ship which appears "in the blink of an eye" in Washington, D.C.

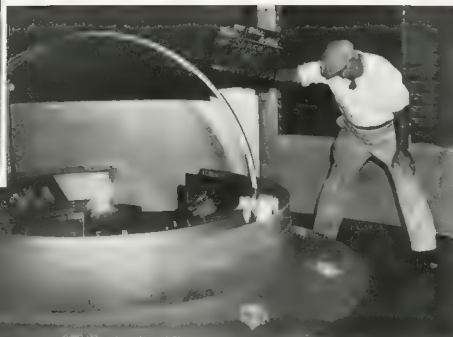
Unlike the film version, in which a frantic world population watches a speeding saucer soar across the sky at a fantastic speed, across continents as newscasters exhort their listeners (in assorted languages) not

be alarmed, the time-space ship appears out of nowhere. "It did not come down from the sky."

Once arrived, however, both this story and the film version greet these enigmatic visitors in the same manner. As Kurt Vonnegut has pointed out, even though the visitors' message may be only "Greetings," they are treated not only apprehensively, but with outright belligerence. Armies soon are gathering, surrounding the ship, aiming their cannons toward the travelers, whether they are using Mikton rays or 50 mm cannon.

After the obligatory wait for something to happen, during which the tension and suspense mount unbearably, the ship opens and out steps the man, Klaatu and a companion, a giant robot.

Farewell to the Master presents Klaatu as a character possessing a



On the set of *TDTESS* above, a shot is set up in the interior of Klaatu's spaceship. In the inset, Lock Martin lifts the visor of his Gort costume for a look at this strange planet.

serene, almost divine presence. He radiates "kindness, wisdom, the purest nobility," and is obviously friendly. Not only in the eyes of the high officials that have gathered to meet him, but to the thousands in the crowd as well. Klaatu has only enough time to raise his hand in the "universal gesture of peace," point first to himself, then to the giant robot with him and say, "I am Klaatu, and this is Gnut," before a maniac in the treetops surrounding the ship blows him away with a ray gun. It is a mortal wound and Klaatu dies without a further word. Gnut, the huge, apparently metal, companion turns toward the fallen Klaatu, then stops, becoming a permanent statue where he stands.

Literature can focus subtly on the most subjective and personal emotions of its characters. It is a strength of good prose that it can lay bare, as if by a razor, levels of thoughts and feelings which would be impossible to examine in a more objective medium such as film.

It is a convention of the science fiction film to present explicit displays of destruction and disaster, to excite the audience with awesome sensual violence. Powerful rays, transcending existent technology, which can melt tanks and incinerate modern weaponry. It is as imperative for the makers of an SF film to make the members of an audience drop their jaws, mouths agape with wonder, as it is vital for a comedian to give his audience belly-laughs.

The Day the Earth Stood Still is effective because of the breadth of its vision. The earth itself is effected by the interruption of all electrical energy. These scenes are as exciting and as stunning as the shots of

deserted post-holocaust cities like Tokyo in flames, and the other overwhelming disasters that will fill SF films in years to come.

The film expands the story to include many various types of characters, enlarging the scope and power of this visit by the alien travelers. There is the young widow, her twelve year old son, her boyfriend, not to mention aged and beneficent scientists, people of all nationalities. Klaatu is even resurrected, having received only a flesh wound this time around, and finally Gnut gets his name changed and is relegated to the role of a menacing uncommunicative henchman.

All of these alterations do not mitigate the film's power. It is affecting viewers time after time. The film was clearly made with care and skill. The makers have exploited the premise of the short story without sacrificing imaginative values. Instead of a different, botched version of *Farewell to the Master*, we have another whole new story.

As to why the makers of *The Day the Earth Stood Still* changed Gnut's name to Gort (unless they felt it sounded too much like a football coach) your guess is as good as mine.

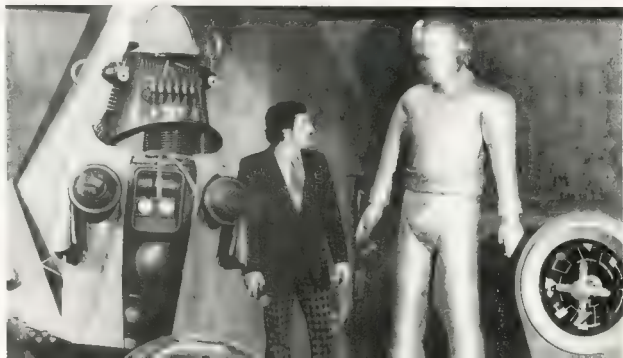
Farewell to the Master, like most effective science fiction, concentrates its attention as well as the reader's on a single protagonist dealing with a mystery that he alone discovers and follows through to its solution.

Cliff Sutherland is a photographic reporter, who, by taking pictures of the great unmoving robot, discovers what his camera sees is not necessarily what meets the eye. His pictures provide evidence that Gnut has not remained motionless. We follow Cliff as he first discovers his suspicions to be correct—Gnut does indeed move, but only secretly at night—and finally we are with Cliff as he spends his next few nights in Gnut's company. He and the reader are witness to Gnut's inexplicable behavior—strange actions involving mockingbirds, a gorilla and two identical corpses. Gnut's activities at times verge on the symbolic, but eventually they are rationally explained.

For all of Gnut's clandestine night moves, he never appears as a ram-paging threat, merely an enigma. He never melts a tank or burns a hole in a concrete wall with a ray emanating from his eyes. His eyes are not weapons, but one of the overriding images of the story. They are glowing red mirrors of his mind and character. They are powerful but hardly destructive. They reflect sadness, tenderness and deep thought. These red-lit eyes are what convince Cliff that the huge robot is almost human, and eventually lead Cliff further to the conviction that Gnut is clearly much more than a robot. How much more is left until the very end of the story.

One of the great joys of reading good science fiction is solving the mystery, figuring out what is going on, and being so convinced that you know, you are comfortable. And then at the very last, the writer says, "You misunderstand. There was more going on all along."

That's the punchline, and this story has it. ■



Robbie the Robot, dressed as Sherlock Holmes, stands on a futuristic set with Gort and Jerry Mathers (of *Leave It To Beaver* fame) in a scene from a television plot that never materialized (right).

The GORT Effects



THE
PRACTICAL
HEAT RAY...
AND HOW IT
MIGHT WORK!

Theory By M. DARKTOWER

Klaatu had fallen, shot by a primitive warrior. In such a case GORT was obviously programmed to neutralize the danger in the most effective manner possible, short of destroying life. Only if Klaatu had died would GORT have been freed of such constraint. As it was, the problem was simple: render helpless the projectile weapons of metal. GORT opened his head visor and activated his *plasma projector*. Luminous light glowed inside his weapons turret, then sprang out. Carefully balanced masses of plasma and magnetic fields contacted the alien weapons and clung, softening them and letting them run on the strangely green soil like melted wax. Large self-mobile weapons went first, followed by semi-portables and then hand weapons. As he was about to begin melting nearby structures Klaatu's voice rang out: "GORT! Declento Brotcol!" On such diplomatic missions Klaatu apparently had the final say. GORT shut down the projector and closed the visor. He would await further developments.

What did GORT use on the Army's weapons? Not a LASER, certainly. Enough light energy to melt a gun or tank would also set off the ammunition, the grass, and also the troops. A

soldier would not simply find his .45 cal. automatic pistol glowing and softening in his hand. He would feel killing pain as the weapon exploded and sprayed him with molten steel. Tanks and anti-aircraft cannon would have littered the entire area with flaming wreckage and incandescents

**'Gort Opened His
Head Visor And
Activated His
Plasma Projector.'**

metal. Few of the onlookers would have survived.

Not a very effective beginning for a peaceful visit.

Removing the weapons *only* was not only a masterful stroke of first contact psychology but seemed also to be part of his programming as a space policeman. Like our own police (sometimes) GORT operates on the axiom of using only *necessary force*. Render them powerless, but do not kill unless necessary.

Good theory, but how would you soften metal and let it puddle without exploding the chemical propellants?

Metal will melt with enough applied

heat. Just supply enough therms with a LASER, a MASER (Microwave Amplification by the Stimulated Emission of Radiation) or an intense magnetic field as in an induction furnace. Unfortunately, LASERS and MASERS (though both can be projected in a beam) generate intense heat and make ammo go *Boom*. A high intensity pulsating magnetic field also generates heat as it flows in and out of the metal: it generates electrical currents in the crystals of the metal it penetrates and those provide the heat. Unfortunately, we are stuck with heat doing the melting. Also, magne-



Gort is about to utilize his heat ray after Klaatu is wounded by a primitive weapon. He is lying at the feet of the soldiers.



Gort renders his two guards unconscious after melting the plastic block which encased him.

troscope. Size can be estimated optically, or by pinging the object with a magnetic 'blip' and checking its resonance and magnetic characteristics. And then the proper configuration of plasma cloud could be launched.

This would be a bit complicated, but it could work.

What would the effect be on people? A strong enough resonating field would break down the basic interatomic bonds of the molecules comprising a human being. Hit by a plasma bolt, a person would glow briefly, then shimmer and evaporate as the molecules became disassociated. A stronger bolt would do the same to a brick wall. Or the surface of Earth.

The limiting factor would be the power available. To completely slag the surface of a planet would take the energy necessary to convert a cubic inch or so of lead to pure energy, and using that to produce the plasma from hydrogen swept up from space, or carried in large tanks aboard the spaceship.

'Wait a minute!' you say. 'A cubic inch of lead?' Right. The most powerful thermonuclear bomb to date converts only a fraction of its mass to energy; less than a milligram, a pinpoint. The rest is wasted and evaporated. But with a truly efficient system of total conversion of mass to energy, you *could* slag a planet. Or 'reduce the Earth to a burned out cinder.'

tic fields don't project in a beam.

Metal can also be melted by applying a stream or cloud of Plasma. Plasma is simply matter heated to the point that it is not only a gas, but it loses its outer shells of electrons and exists mainly as the nuclei and herds of very high energy electrons running around loose. The free electrons dropping into their customary orbits around the nuclei give up lots of energy, usually felt as heat. A beam or cloud of plasma could be projected which would indeed melt a gun, but again the ammo would go *Boom*.

Oh, well.

Maybe if you combined things. . . .

A batch of plasma can be contained in a magnetic field, which acts as a bottle. This is one of the basic facts of physics that may make fusion power practical for power generation. Moving plasma generates a magnetic field. A highly concentrated squirt of plasma contained in a very intense bottle of magnetic force might be possible. The initial pulse of the magnetic field could be reinforced by intensely spinning vortices of plasma which would generate their own fields, and which might be kept spinning by a feeder beam from a LASER or MASER. When such a blob of plasma touched a metal object, it might tend to cling and dissolve the metal. Generating heat. *Boom* again.

Well. . . .

How about sound?

Very high intensity sound can cause fatigue in metals, reducing them to powder. It can be aimed in a stream like a beam of light. It does work at a distance. It might be able to work without generating too much real heat. Gun + sound = powder. Yes, that just might work. But it would also

take time. You would be tied up aiming at one object and melting it while the rest of the world opened up on you.

Perhaps a balanced field of plasma and magnetic energy could be generated that would englobe a metal ob-

'A Person Would Glow Briefly, Then Shimmer and Evaporate'

ject and resonate. The plasma and magnetic field could cool and die respectively, generating ultra-sonic 'sound' in the crystalline structure of the metal, fatiguing it into powder. The target could be analyzed by a quick flicker of high-intensity LASER energy heating a pinpoint spot to vapor and being analyzed by spec-



Gort stands immobile before being encased in the plastic block.

SPECULATION ON THE PHYSICAL POSSIBILITY

HOW THE EARTH STOOD STILL

By IRV KARCHMAR



When Klaatu found it necessary to demonstrate the extent of his powers to the people of Earth, he chose a method which would symbolically represent both the scientific intelligence and social maturity of the highly advanced civilization from which he came.

The method was simple and effective—he stopped all electrical power on earth for half an hour—thus immediately convincing the countries of the world that his “ultimatum from space” was far more serious than they had imagined.

One imagines that the world politi-

worlds would probably do so along the magnetic lines that are known to exist between the planets and the stars that make up the galaxy, and so would have already discovered the application of the theories involved.

But, one might ask, would a disruption of all electrical and electromagnetic energy on earth not also kill all plant and animal life, since brain and nerve impulses are basically electrical in nature? No, it would not. The electrical impulses that travel along the nerve fibers of all life are *electro-chemical* in nature, and would only be affected by a different

grammed into it, pinpoint them, and keep them free of the field. What would be needed is a type of world-spanning computer like *Minerva*, which Robert Heinlein described in “Time Enough For Love.”

With such a highly sophisticated and sensitive system, it would be possible to dampen the power at the point the cables leave the main generators that supply power to the city but to also pinpoint the cables leading to hospitals and leave a pocket in the field for them to travel through. Planes in flight would be no problem, since they would be above

“... what could one man, a small saucer and a hulking, humanoid-type robot do against a hydrogen bomb, even if they did have some kind of heat ray?”

cal leaders must have, at first, felt smugly secure in the knowledge of the military power at their command; ballistic missiles and hydrogen bombs would surely be enough to stop any planetary threat, even one from a Galactic civilization as advanced as Klaatu’s.* After all, it seemed as though we were almost as advanced ... our space program was already in its initial stages. And anyway, what could one man, a small saucer and a hulking, humanoid-type robot do against a hydrogen bomb, even if they did have some kind of heat ray?

What indeed?

They could simply pull the plug on the world! One cannot launch a missile if the electric current needed to push the button and activate its internal guidance system is disrupted. And the Earth, even with all of its massed military power, would be totally defenseless.

What is required first of all is a device that could blanket the earth with an intense magnetic field. This would act as a dampening field, effectively disrupting all electrical current within it. The physics necessary to create such an effect is already known, although still in a theoretical stage. But any civilization sufficiently enough advanced to travel between

kind of field. This is not to say that Klaatu *could not* have created such a field, simply that he chose not to. In retrospect, his actions during his entire stay on earth seemed to be guided by some sort of “prime directive” not to interfere with the culture or life of the planet. He was simply to give his warning and leave it up to us.



Klaatu, disguised as an earthman, answers a reporter's question. His answer was so calmly intelligent that the reporter immediately cut him off and moved on to someone more emotional.

Yet, what really was impressive about the demonstration was not the stopping of all electrical current on earth, but *how* he managed to make exceptions. Planes in flight were not affected, nor were hospitals. This aspect is often overlooked, but it is actually the most intriguing.

To make these exceptions would require a computer so sophisticated that it could not only control a magnetic field of such immensity but that its sensors could also locate the exceptions that would be pro-

grammed into it, pinpoint them, and keep them free of the field. What would be needed is a type of world-spanning computer like *Minerva*, which Robert Heinlein described in “Time Enough For Love.”

Of course, the amount of calculations are cut down considerably since the earth was made to stand still from 12:00 noon ‘til 12:30, which would mean that much of the planet would be sleeping. The half that was not would have few lights on in broad daylight. Of course there are variations to be allowed for time and degrees of darkness around the globe, but they could be compensated for. (Actually, there was an original opening scene in “The Day the Earth Stood Still” that was cut from the finally released film in which Klaatu’s saucer is shown circling the earth and apparently taking a sensor scan for some then unknown purpose. It would probably have made the film technically more interesting.)

All of which opens up another question.

If it is possible for Klaatu to stop all electrical power on earth, which really means throwing man back into the Victorian Age of coal and kerosene forever, why would he threaten to reduce this earth of ours to a burned-out cinder?

Perhaps it is because his civilization has learned through bitter experience that when such a solution was attempted on other worlds that inquisitive and intelligent beings will someday, somehow find a way of circumventing the field or negating it. ■

The Music That Made

Article by

GEOFFREY DARROW

When the time came for Robert Wise to choose a composer for *The Day the Earth Stood Still*, he selected the man with as much care and judgment as he had shown in picking an editor, cinematographer or special-effects director. He chose Bernard Hermann.

Hermann was associated with Orson Welles' *Mercury Theatre of the Air*, where he had served as musical director, and had scored Welles' masterpiece *Citizen Kane*. It was the first film each of them had ever done.

From there he went on to score such films as *The Magnificent Ambersons* (again for Welles), *The Devil and Daniel Webster*, *The Ghost and Mrs. Muir*, and later still, scores for Alfred Hitchcock (*Psycho*, *Marnie*, *North by*



== Bernard Hermann ==

Northwest, Vertigo), Ray Harryhausen (*7th Voyage of Sinbad*, *Jason and the Argonauts*), Martin Scorsese (*Taxi Driver*) and french film director Francois Truffaut (*The Bride Wore Black*). Truffaut also starred in *Close Encounters of a Third Kind*, of course.

Hermann brought the same innovative sense to these films that he did to *The Day the Earth Stood Still*. In scoring *TDTESS* Hermann removed all woodwinds from the orchestra and concentrated his arrangements on the brass section and electronically implanted strings to create a sense of the unworlly. This group of electronic instruments included two theremins, electric violins, electric bass and an electric guitar certainly the first time it was used in the 50s to produce an effect other than rock 'n' roll.

From the film's first mixture of sight and sound, Hermann's score sweeps through the sky heralding the sau-

The Earth Stand Still

cer's arrival as well as setting the mood for it. An urgent patter of piano keys, offset by electronics and opposed by Hermann's theme for the Galactic visitor is first heard as the Air Force tracks the saucer's arrival.

It is interesting to note that in a series of five basic notes, and variations thereof, Hermann has created themes for both forces—Terran and Alien. The music tracks this scene and sets a mood for the entire film. It underscores a series of mental and physical confrontations by the wary earthmen and their visitors, keeping the audience subliminally aware of them through visual and audio contact. This idea is present in most of Hermann's works.

A classic example is the shower scene from *Psycho*. As the crazed Anthony Perkins slashes Janet Leigh, the music slashes at the audience in a series of high-pitched notes. This is also done in *TDTESS*, albeit with greater subtlety. Gort's appearances are underwritten by taking a primal beat which reflects our own base fears of the unknown and mixing it with *TDTESS*'s own basic theme. Such moments give the film its tonal base.

Bernard Hermann created a full symphonic score for *TDTESS* without resorting to the cheap 50s gimmickery of twanging guitars and squealing brass, and in doing so innovated the use of electronic music so popular today. As with all men ahead of their time, he will be missed more than ever now that he is gone.

(NOTE: Bernard Hermann's score for *The Day the Earth Stood Still* is available on Decca Records, titled *The Fantasy Film World of Bernard Hermann*—Bernard Hermann conducting the National Philharmonic Orchestra.

Illustration by Hugo-Award Winning Artist
PHIL FOGLIO



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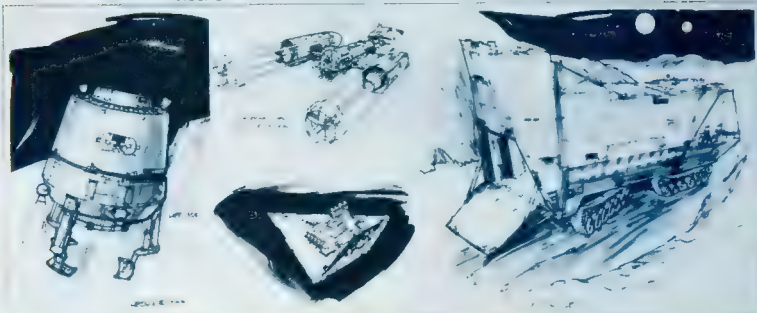
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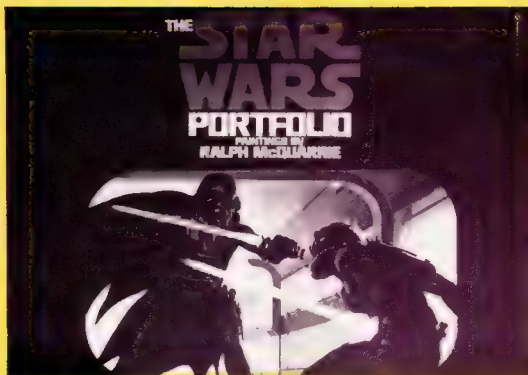
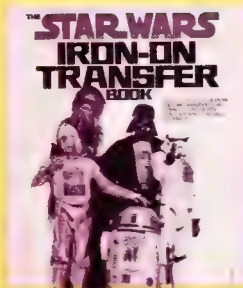
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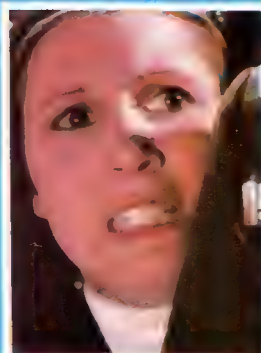
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FAN SCENE

The FAN SCENE is a potpourri of events and people who are involved in science fiction and fandom. If you would like to submit any information regarding your club, starbase, etc., or any photos, cartoons, coming events, etc., send it (along with a SELF-ADDRESSED, STAMPED ENVELOPE) to: FANTASTIC FILMS FAN SCENE, 2701 W. HOWARD ST., CHICAGO, ILL. 60645.

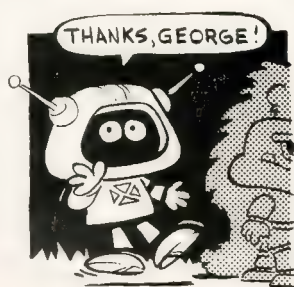
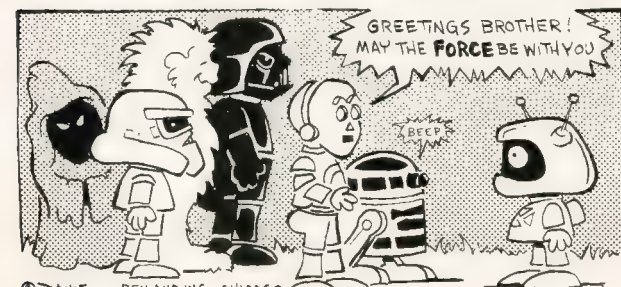
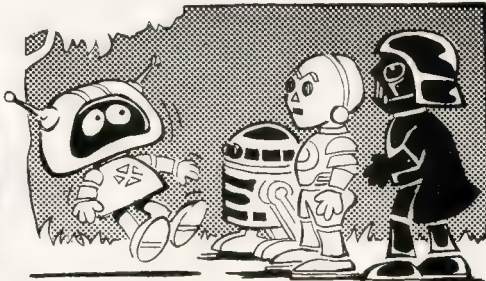
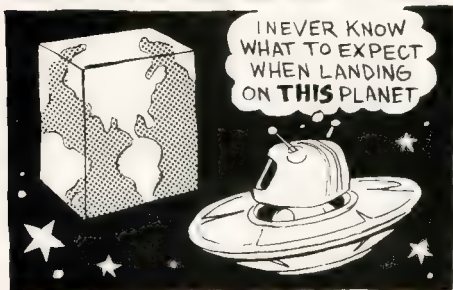
STAR WARS



Starbase 18, a science-fiction club from South Bend, Indiana sent us these photos of some of the marvelous costumes they created from the characters of *Star Wars*. Pictured clockwise, they are: Kent Lucas (Sir) as a Tusk Raider; Chris Winter, Barb Taylor, and Tom Sisk as Han Solo, Princess Leia and Luke Skywalker running from danger; Barb Taylor as Princess Leia returning fire; Bob Cortier as Darth Vader; and Pat Harvey holding his own head as Chewbacca, the lovable Wookiee. The club has done much fine work, including the Robert Heinlein blood drive in Detroit and charity work for retarded children.



SPACED OUT WITH XENO



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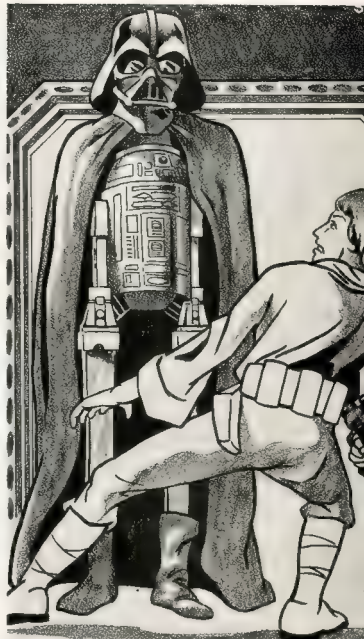
Contributor Daniel Hampton sent in this cartoon strip that combines ufology and Star Wars. We did not want to **FORCE** the issue, but since it was with us, it seemed appropriate to include it.

FAN SCENE

ENTERTAINING THE TROOPS



A prototype remote-controlled, R2D2-type robot developed by General-Technics moves past fans sitting in line waiting to see STAR WARS. The working robot costs approximately \$3000.00, but you can WIN one FREE. See back page



"ARTOO . . . Not You!"

To Our Readers:

We have tried to make this issue of FANTASTIC FILMS visually exciting, informative and thought-provoking; a magazine that is both selective and unique in its approach to fantasy and science-fiction in the cinema. If you have any comments on this issue, or suggestions for future issues, please let us know. Fill in the information below and send it to: FANTASTIC FILMS READER, 2701 W. HOWARD ST., CHICAGO, ILLINOIS 60645. You may use a separate sheet of paper if you wish.

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COMMENTS: _____



Combining business with pleasure is the Hollywood Science Fiction Theatre, a group of entrepreneurs who put on sf shows at shopping centers and the like. The show and theatre was the collective brainchild of Jack Mulqueen, Gary Joleas and Gus Juodvalkis. It includes a continuous showing of science-fiction trailers spanning five decades on the giant 5' x 7' screen and a monster parade, featuring such creatures as the Fly, a mutant worker from the planet Metaluna, from This Island Earth, and a lovely space princess (played by Beverly Tomita).

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The Magazine of Fantasy & Science Fiction in the Cinema



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Available in your favorite colors, Star Jewels come in (from left to right) red, smoke, silver, green, blue and amber. Each gem measures $1\frac{1}{4}$ inches wide, $2\frac{1}{2}$ inches long and 1 inch thick.

Yes, science fiction has become science fact! The Star Jewel pendant has a red light-emitting diode in a mirrored multifaceted lucite setting. When you switch it on, a patented integrated circuit blinks the diode about three times a second. So, as the pendant swings lightly on its chain (it only weighs an ounce), the jewel seems to dance with inner reflections.

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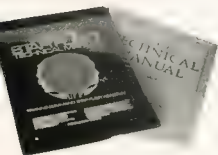
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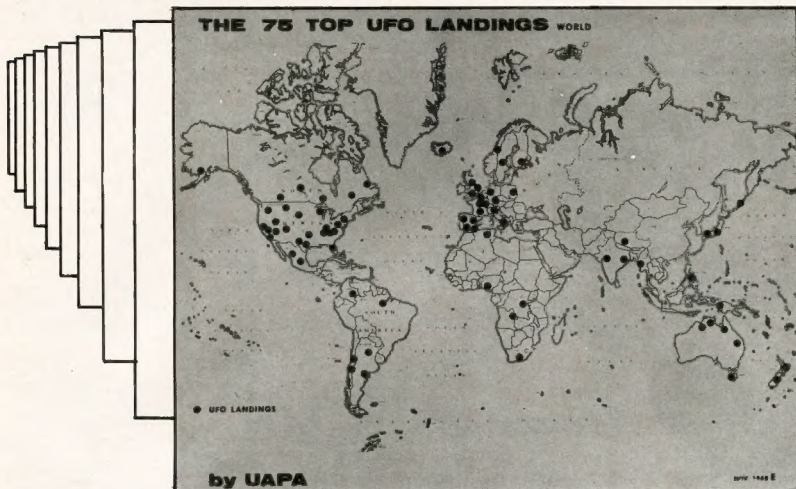
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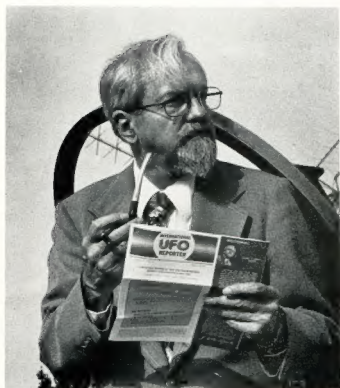
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All you have to do to win the fabulous remote-controlled ROBOT pictured above is complete the official entry form at the bottom of this page. Simply tell us what you think the robot should be named and why it should have that name, in 25 words or less. Then, mail your entry, along with your name, address and age to: FANTASTIC FILMS ROBOT, 2701 W. HOWARD STREET, CHICAGO, ILLINOIS 60645. All entries must be postmarked by September 1, 1978. (Read contest rules on this page for complete information and regulations.)

CONTEST RULES:

1. The robot contest is open to all residents of the United States and Canada, regardless of age.
2. Duplicate prizes will be awarded in case of a tie.
3. All entries must be received by September 1, 1978, and prizes will be awarded on September 8, 1978. Winner will be notified by mail.
4. All taxes will be paid by Fantastic Films magazine.
5. Employees of Fantastic Films magazine

The robot should be named _____

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and Blake Publishing Corp., their families and friends, are ineligible to participate.

6. You may enter as many times as you wish, but ALL ENTRIES MUST BE SUBMITTED ON THE OFFICIAL ENTRY BLANK ONLY. No facsimiles, please.
7. The entries will be judged on a 100 point scoring system as follows:
40%—originality
30%—sincerity
30%—imagination
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